The Builder.

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PREVIOUS volumes of our journal contain accounts and notices of the Model Baths and Washhouses for the Labouring Classes, erected in Goulston-square, Whitechapel. In the fourth volume especially (p. 471) there is a description of the building; also a reply by a member of the Committee (p. 496) to some comments on the slowness of the proceedings, which we then felt it our duty to make; and in the fifth volume (p. 249) there are some further particulars. In our present number we give a plan of the establishment, a section, and some of the constructive details,* and we shall avail ourselves of the opportunity to place before our readers a variety of statistical particulars, and to strengthen the appeal that the committee are making to the public for some further assistance to enable them to complete their work.

The establishment of baths and washhouses is a matter of the utmost importance. The purification of the body is a great step towards the purification of the mind.

When it was first proposed to provide the working classes with a warm bath and a clean towel for 2*d.*, few expected that so important an experiment would succeed; but notwithstanding many difficulties, the success of the bathing establishments has been complete: they are at length self-supporting, and the number of persons using them increases steadily every month they are open.

The cost of cleanliness can now no longer be pleaded as an excuse for dirt; and no one who reflects upon the wonderful and delicate mechanism of the skin, and its susceptibility to disease, can doubt that the 500,000 baths which have been taken in the past twelve months at the Baths in Whitechapel, in St. Martin's, and in St. Marylebone,—or that the 1,000,000 which have been taken in London in the three years since the first was opened, have very much contributed to the health and comfort of those who use them, to say nothing of the social improvement and moral elevation induced.

The Parent Committee for Promoting the Establishment of Baths and Washhouses for the Labouring Classes was appointed at a public meeting, held at the Mansion-house, October 16th, 1844: the Rev. Sir Henry R. Dukinfield, Bart., was chairman of the committee; Mr. William Hawes chairman of the committee of works; and Mr. James Farish and Mr. John Bullar were the honorary secretaries. The committee was established to promote the health, cleanliness, comfort, and improvement of the industrious classes, and its duties were twofold,—1stly, to promote the establishment, as generally as possible, of public baths and washhouses; and, 2ndly, to erect and open for use, in London, an establishment of baths and washhouses, the plans and construction of which should be so carried out as to render it serviceable, not only for the industrious classes in the neighbourhood, but also for imitation *universally* as a model establishment.

The benefits to be expected are those which result from the improvement of the condition of the labouring classes. In all crowded cities and towns the labouring classes are exposed to much evil, from being compelled to endure, and so being gradually habituated to, an amount of personal and domestic dirt, which tends to moral degradation as well as to the loss of health. The main object of these establishments is to enable the labouring classes to escape from that evil, by bringing within their reach those means of cleanliness which they could not otherwise enjoy. Let us see what the committee have already done.

Their proceedings have led to the establishment of seven institutions besides the Model Establishment, namely,—one in George-street, Euston-square; one in the parish of St. Martin-in-the-Fields; one in Marylebone; one in Westminster; one in the parish of St. James, Piccadilly; one at Greenwich; and one at Poplar: also to the establishment of similar institutions in Manchester, Birmingham, Bristol, Norwich, Hull, Preston, Oxford, Wolverhampton, Macclesfield, Nottingham, Bolton, Worcester, York, Exeter, Hereford, Chester, Plymouth, Sunderland, Newcastle, Carlisle, Coventry, Belfast, Waterford, and other places. The number of bathers at the four establishments in London already exceeds 1,155,000; and the number of women who have washed and dried the clothes of themselves and families, amounts to no less than 215,000. The fact has been established that warm and cold baths, and the means of washing and drying linen, can be profitably provided for the working classes, at prices so low, and with conveniences so great, *as to place these necessary means of health within the reach of all but absolute paupers.* The committee have circulated in all parts of the kingdom the results of their experience. They actively promoted the passing of the Act of Parliament (drawn gratuitously by a member of the committee) to enable boroughs and parishes to erect public baths and wash-houses. They have provided plans and information to promote the erection of similar establishments in foreign countries, and have reason to believe that, through their exertions, the city of London now enjoys the credit, not only throughout almost the whole of Europe as well as the United States and other parts of America, but also in other parts of the globe, of having taken an effective lead in promoting the general establishment of these important institutions.*

So much then having been effected by the committee—by the aid of their supporters—they may justly look for some further help, not to defray the current expenses of the establishment, for it is now self-supporting, but to enable them to bring it to that state of completion which is required to meet the wants of the very poor neighbourhood in which it is placed.

All that they require to increase the number of tubs from 44 to 88, is 700*l.* With this sum, this large establishment, with 88 double wash-tubs, ironing-boards, drying chambers, and 98 first and second class men's and women's baths—the first projected in London—that upon which the construction and arrangement of all others, of any importance, have been based—will be complete; and whereas, in ten months of the past year, nearly 75,000 persons have been supplied with clean linen, and in twelve months, nearly 140,000 people have been bathed, there can be no doubt that in the next twelve months nearly 200,000 will be supplied with warm baths and towels at an average cost of 3d. each; and, supposing the washhouse completed, as proposed, that 400,000 men, women, and children, or 80,000 families, will owe to its conveniences and cheapness, clean and pure linen, at an average cost of one halfpenny per week for each person—a cheapness obtained without recourse to public assistance by annual subscriptions. This sum is now only required to finish the works, built in about equal proportions, with capital borrowed at interest on mortgage and upon personal security, and by voluntary subscriptions.

The total outlay, up to this time, has been 30,023*l.* The building, machinery, steam-engine, boilers, tanks, baths, wash-tubs, drying apparatus, gas and water fittings, &c., cost 19,786*l.* 6s. 3d. The engineer's commission on works executed, clerk of works, surveyor's charges, and fees to official referees, &c., 1,474*l.* 17s. 3d. The furniture, towels, bath fittings, tools, and utensils, cost 650*l.* 10s. The experimental works incidental to the erection of the first establishment of baths and washhouses on a large scale, for ventilating apparatus, drying apparatus, mode of supplying water to the baths, &c., *necessary to attain the most economical arrangement and the minimum annual cost for working expenses*, are estimated at 1,500*l.* The expenditure has been much greater than was expected, and (as we cannot help thinking) greater than it ought to have been. The committee themselves admit it; but they plead that they have been working for the general question, and that money will be saved, not only here, but in foreign countries, by means of their expenditure. Even were it not so, however, the fact that a large part of the money raised has been provided by members of the committee themselves would suffice to stop further comment on this head.

There must be no such expenditure in other places, nor is it likely that there will be: some of the other establishments, erected with the benefit of the committee's experience, are now paying 7½ and even 10 per cent.

An establishment may be erected at a cost of from 2,000*l.* up to 8,000*l.* With reference to the smaller sum, it can either be expended in a building complete in itself, or in a portion of one, to give afterwards double or treble accommodation. If, in all probability, the town will not eventually require a larger building than could be constructed for 2,000*l.*, it would be well to expend the money in a complete building in the first instance; but if, on the contrary, increase is to be looked for, then part of a building should be erected, to be added to as the habits of bathing and washing become developed, bearing in mind that the machinery, in the first instance, be suited for the building when increased to its full extent.

It is not so much the first cost which is to be looked at as the after expenses, consequent upon the building not being erected in a sub-

* See pp. 89 and 90.

* As an evidence of the success abroad of the exertions of the committee, it may perhaps be sufficient to state that, in consequence of a report made to the French Government by a commission appointed in November 1849, after an examination of the model and other establishments in England, a grant by the authorities is about to be made of twelve sites for public baths and washhouses in Paris, with a gratuitous supply of water to each.

stantial and proper manner. The peculiar traffic and the requirements of an establishment of this description render it essential that it should be constructed in the best manner; and the economical working and success of the institution depend greatly upon the adaptation of suitable machinery and fitting.

The contract for the establishment to be erected in the parish of St. Margaret, and St. John, Westminster, which will contain 64 first and second class baths, 60 washing compartments, 60 separate horses in drying chambers, 16 ironing compartments, 2 large plunge baths (first and second class), boiler-room and engineer's workshop, and dwelling-rooms for the superintendent and matron—is (with machinery) for the sum of 7,500*l.* To this must be added 1,500*l.* for fittings, furniture, towels, &c., required before the baths can be opened to the public—making together a sum of 9,000*l.*, exclusive of the cost of the ground,* the value of which is so dependent on the locality, that it is excluded from the calculation: it may, however, be safely estimated on an average as forming a charge of 1,500*l.*, making the total cost of such an establishment 10,500*l.*

The committee have published some "Suggestions for Building and Fitting up Parochial Establishments," which parties who desire to avail themselves of the Act 9 & 10 Vict. c. 74, "to Encourage the Establishment of Public Baths and Washhouses," † should obtain. The committee point out that the site chosen for the building should be in a *good thoroughfare*, having entrances from two streets if possible.

The building ought not, at first, to be too large, but, as we have said, should be so arranged as to be capable of enlargement. For a district containing a population of 80,000 or 100,000 persons, it will be more advantageous to provide two establishments. If a sufficiently large site can be obtained, it is desirable to construct the baths and washhouses with the waiting-rooms upon the ground-floor. The building, with its machinery and fittings, should be constructed with the best materials and workmanship—plain, but strong—suited to the class it is intended to accommodate, and with a due regard to ventilation, light, and order.

They consider it would be false economy to make a saving in the expense of construction at the risk of requiring a single additional attendant; and that it is true economy to spend 300*l.* at the outset, to save the services of a single bath-attendant.

Too much importance can hardly be attached to obtaining the best valve, or cock, for the supply of the water to, and its withdrawal from, the baths. In the summer, when it is difficult to accommodate the bathers, one minute saved in filling, and one in emptying a bath, will, upon 1,000 baths, be equal to an addition of four baths, for eight hours each, to the establishment, producing, when fully employed, 16*s.* per diem.

The cost of fuel depends greatly on the perfection of the apparatus. That cost, at one of the earliest establishments, with coals at 12*s.* per ton, has been about 7*5s.* per 1,000 warm baths; while at the Model Establishment, with small coals at 10*s.* per ton, it has been about 14*s.* per 1,000 warm baths.

The following comparative statement will serve to show the development of the practice of bathing, and the extent to which the people avail themselves of the provision of the means of that essential condition, cleanliness of person, which is afforded to them. The receipts prove that the price paid for the baths (warm baths, first-class, 6*d.*; second-class, 2*d.*: cold baths, first-class, 3*d.*; second-class, 1*d.*), small as it is, covers all expenses incidental to their maintenance, and will *eventually* prove a source of considerable income.

The *Bath Department* consists of ninety-four first and second class baths: and here we see the attendances and payments during three years:—

Quarter ending.	First Year. 1848. Number of Bathers.	First Year. 1848. Receipts. £	s.	d.	Second Year. 1849. Number of Bathers.	Second Year. 1849. Receipts. £	s.	d.	Third Year. 1850. Number of Bathers.	Third Year. 1850. Receipts. £	s.	d.
March	5,790	70	12	8	11,668	161	16	9	17,500	246	1	4
June	15,906	179	10	2	34,279	486	8	6	46,678	679	8	8
September	18,848	224	15	4	47,712	610	0	6	49,941	657	0	6
December	8,084	106	11	11	14,423	197	14	1	21,500	296	13	1
Total	48,637	580	9	3	108,082	1404	19	10	137,519*	1880	3	7

* Two-thirds of these were second class.

Of the bathers, there were in 1849, 4,695 women, and in 1850, 10,589.

In the washhouse and drying department there are forty-two washing compartments in work. On the 1st January, 1850, the present tariff of charges, 1*d.* for each of the first two hours, and 1*d.* for each half-hour afterwards, was adopted. At first, so strong was the prejudice against "washing in public," as it was called, that few women (when the dense population of Whitechapel is considered) availed themselves of the accommodations provided. The advantages to be derived are, however, gradually becoming better known and appreciated by the working classes; and the rate of progress is now satisfactory, as the following table will show:—

1850. Quarter ending	Number of Washers.	Number of Hours' Washing.	Receipts. £	s.	d.
June	2,449	5,730	32	15	2
September	3,910	8,018	41	16	3
December	7,888	17,970	97	14	4

The average time occupied by each woman has been two hours and a half, at a cost of 3*d.*, exclusive of time and soap. The temperature of the drying chamber in which the clothes are placed to dry is above 220 degrees.*

The engraved illustrations which we give will explain themselves. The plunge bath joins on to the main building at A A; but we were unable to draw it on the same page without adopting a smaller scale for the whole, which we thought undesirable.

Without repeating the description of the building already given, we may briefly mention that the main area covered is 130 feet long by 81 feet wide. Beneath the baths on the north side is a large reservoir, the walls of which are tied together by iron rods, and rendered with seyssel asphalte. The roof is of iron, framed in divisions. The floor is of slate. Each bath is surrounded by slate partitions of a sufficient height, and covered in at the top with galvanised gauze. Turning the same handle to points marked on a plate supplies hot water, or cold water, or empties the bath, by means of a "three-way" cock. The baths are sunk in the ground, and are made of cast-iron.

Mr. P. P. Baly was, as our readers know, the architect, and Messrs. Piper were the contractors.

We objected strongly, when the building was completed, to the ugly shell in which the committee have encased their valuable kernel, and we have reason to believe that our remarks were not without effect on the exterior appearance of the other establishments which have followed.

We will only say, further, that the institution is always open for the inspection of visiters; and that the accounts, the cost of the building, the receipts, and the expenditure, may be seen by an application to the active and intelligent assistant secretary, Mr. Woolcott, at the committee room, in Exeter Hall, Strand.

There can be no doubt that public baths and laundries will produce important benefits to all classes, and we hope to see them springing up in all our towns, properly built and efficiently managed.

PROFESSOR COCKERELL'S THIRD LECTURE ON ARCHITECTURE.

In pursuance of the proposal, in a preceding lecture, to give a short analysis of the writings left us by the great masters of antiquity, who ought to be worshipped as the fathers of the noble art of architecture, reference was made by the Professor to the writings of Vitruvius, Serlio, and De Lorme, which formed the subject of the last lecture. In continuation of the latter able author, it would be found that he had especially treated of roofs on the circular principle, with cross joints: the cross joining of short pieces was elucidated by diagrams exhibited. These were on the same principle as the transept roof of the building in Hyde-park for the Great Exhibition, and this experiment had now to be tested by experience, the span of it being 72 feet, being within 4 feet the same as the span of Westminster Hall. Alberti says, "The great writers are too little studied, because we run after the whims of the moderns." Balthasar Peruzzi had proved that he was not only an excellent painter, but that he was great in perspective—he also was worthy of study. We were apt to neglect those great men, as old fashioned, whose works were called obsolete, mostly because we had no good translations of their writings. In the midst of practice we should not forget that this is a learned art, and must be guided by the great masters. The mission of an architect was to direct the builder, and he should be superior to him in all theory. Socrates says, "If you mean to be an architect, you want many books." Yet not one in ten of the present practitioners ever read the works of the great masters who had preceded them. In the 11th chapter of the 3rd book of Philibert de Lorme, the precise mode of making concrete was given in detail; yet, in ignorance of this, concrete was boasted as a modern invention. Ware, who published a valuable book, had certainly never read De Lorme, as he says nothing about concrete. On the contrary, when William the Dutchman came to England, the fashion of laying founda-

* The ground at Goulston-square cost 1,200*l.*, with a ground-rent of 30*l.* per annum, for 99 years; at St. Martin's, a rent of 82*l.* per annum is paid to the Commissioners of Woods and Forests; at Hull it has cost 1,500*l.*; at Bristol, the ground has been given by the Corporation; and at Westminster, including a house for the superintendent, it will cost 3,500*l.*

† Copies of this Act and the subsequent Act, 10 & 11 Vict. c. 61, may be obtained at the Committee Room, 6, Exeter Hall.

* See The Builder, December 7th, 1850, for the details, and the time occupied in drying, &c. The mode of constructing drying-closets has been fully discussed in our pages.

tions on wooden planks came with him, and was followed for a considerable time. When Palladio appeared, everything in Italy was encouraging. He was sought for and patronised by the great merchant princes, and the most dignified ecclesiastics. Palaces and villas were building in all directions, and of his works it may be said Palladian art combines all that is magnificent in the proportions. At the age of thirty he established himself at Vicenza, where, in competition with such men as Julio Romano and others, he triumphed by the erection of the famous theatre in that city. At the age of ages, when he says he was looking forward to a more glorious world, he published those models we find in his admirable work. His four precious books are useful to all generations. He designed a restoration of the Forum (of which a drawing was exhibited) with the Temple of Nerva at the extremity. This temple was then existing, but has since been destroyed. Its Greek portico he united to the other lateral erections by arches, which may be objected to for not being trabeate; but it had lately been adopted at the New Exchange, in Glasgow, and was said to have a very beautiful effect. The use of the arch was indispensable in building: its union with the Greek orders was achieved by the Roman architects, and carried to the highest perfection for modern purposes by Palladio. His writings might be called the Holy Writ of architecture. Like Herodotus and Sir Christopher Wren, he asserts and reasons upon every point, but may be said, nevertheless, to be often throwing pearls to swine. He treats of the orders of arches: the orders of arches will be dilated on in a succeeding lecture, as a subject deserving intense consideration, although the very term of it was scarcely received. Chapters 21, 22, 23, and 24, treated of the proportions of rooms, a subject hitherto quite overlooked among us, but now of great importance; for, with the better feeling of the age, we were not forced to build hutches such as suited our ancestors. Staircases were also treated in this book. In the second book, houses and villas form the contents; for the epoch of Palladio was not a church-building age: the merchant princes of Italy loved to build palaces worthy of their taste and fortunes. Forty-five examples of them are in this book. The third book treated of roads and bridges. The fourth book contained ninety-nine plates, illustrative of the temples of Rome; fifteen of these in the city, the greater number of which have been since destroyed, and eleven temples out of Rome. There have been three English editions of Palladio: one is by Leoni, who built Anglesey House, in Burlington-gardens. This mansion had the remarkable features of the façade being constructed with nine pilasters—an odd number not admitted in the orthodox rules, and probably never noticed by the greater number of living architects, although it had a very excellent effect. The most splendid edition, however, was the one published by B. Scamozzi, which was well worthy of the subject. So much for Palladio, that great and illustrious man.

Vignola is the next writer to be commented on. He was much encouraged by Francis I. of France, who knew how to congregate all men of talent about him. Vignola's book treats only of the five orders, and is practically useful, although his entablatures are much too heavy. He first gave the true rules for forming the entasis of columns, and was certainly a man of extraordinary merit. His name has been used for an abundance of small works treating of the first principles of Greek and Roman architecture. Scamozzi, who followed, had great merit, but not comparable at all in the Palladian style. His book is called "Universal Architecture of all known Scenes in the World!" From his exceeding boasting, Inigo Jones refers to him as Signor Bragadoccio. In his will he imagines the universal affliction his death would cause, but consoles himself that his works will preserve his name to all eternity, and gives directions for a monument to be erected to the memory of "such a man as he."

No one approached Palladio like Inigo Jones. His design for the palace of Whitehall is beyond all praise. The only part we possess, the Banqueting House, is universally admired by architects of all countries. He left only MS. notes, which are preserved in Oxford, on Palladio, and on Stonehenge. The first are valuable to the student: those on Stonehenge display the vanity of Jones, and paint him a bit of a coxcomb: herein he exhibits a sad ignorance of history and antiquity. As Jones had the arrangement of the masques and similar entertainments at the court of James I. he had an excellent opportunity of indulging his fancy in the architectural scenic decorations. Dramatic scenery affords great play for the imagination and for study. Servandoni, who built St. Sulpice, at Paris, was a scene-painter. Next in rotation is F. Blondel, a very accomplished architect, whose fame as an original genius is fully established by the truly beautiful Porte St. Denis and Porte St. Martin at Paris. His book on architecture is divided into five parts: there is an ungracious absence of his great contemporaries in his work, as he never names either Sir C. Wren, who had then greatly advanced with St. Paul's, or his own talented countryman, Perrault. The first book treats of the orders, as received by the great masters, and in true ancient monuments. The second book treats of the parts, and especially of the composite. The third is occupied with the peristyle and intercolumniations. The fourth treats of openings, such as doors, windows, arcades, and arches, especially the two remarkable ones erected by him, before named, in which there is an originality never attained in classical times. The fifth book contains optics and perspective. These five books are remarkable, as no similarly elaborate work had before been composed. Sir William Chambers wrote an elegant work: the student is always safe in the hands of Chambers, whatever be the fashion of the times. In the Professor's early days, architects were devout Greeks: now Romish Catholic art is the fashion for a term of time only. It is not by fashion, but by great monuments that an epoch is typified. Adams followed Chambers, but they emasculated art and made it feminine. Athenian Stuart and Walpole opened new veins: the remains of art in Greece were worthy of adoration, but they were fitted to the climate and position. The Parthenon or the Acropolis had a majestic base, which would have made it ridiculous if built in a swamp. The glorious Doric was at Athens on a fitting site. It were equally ridiculous to adapt the Gothic of churches to hotels, bazaars, and similar buildings. Gothic was now in the ascendant, but the rage for mimicking it would soon pass away. Youth follows blindly, but at mature age we criticise and reflect. The problem we have to solve is by the cultivation of the mind, which is the certain index of an artist's capacity to emancipate himself from routine and to become a distinguished ornament of his profession.

In conclusion: of the high importance of the architect, he would mention that of Blondel, quoting Holy Writ, where he said "*pour comble de malheur*," the loss of the architects was expressly bewailed. The passage is in Isaiah iii. 3.

TESTIMONIAL TO DR. CONOLLY.—Some of our readers will be glad to learn that the promised subscriptions now amount to more than 600*l.* The committee have decided to have Dr. Conolly's portrait painted by Sir John Watson Gordon, for which purpose Dr. C. proceeds forthwith to Edinburgh. They have further determined to limit the outlay on the painting and engraving to 400*l.* in order to have a residue sufficient to obtain a handsome piece of plate, with an inscription. The list is still open, and Dr. Forbes, of Old Burlington-street, will gladly receive fresh subscriptions. Never was a testimonial more truly deserved.

WINDOW FOR ST. LUKE'S, CHELSEA.—Some of the inhabitants of St. Luke's, Chelsea, having long been desirous of seeing a stained glass window at the east end of the parish church, a subscription has been commenced for that purpose, and Mr. Gibbs has furnished a design.

ARCHITECTURE AND THE EXHIBITION

THE clever author of the "Historical Inquiry into the Principles of Beauty in Art," has, it seems to me, misrepresented, in his letter to you last week, both Mr. Barry and the art he professes.

Mr. Barry (in common with other architects), it is said or implied, "*could not*" furnish what was wanted for the Hyde-park Exhibition,—because, being an architect, his rule (like other architects) was "*to copy*."

Will the author of this discovery be kind enough to show us in what respect Mr. Barry (and modern architects in general) have *copied more* than Mr. Paxton? or more than the ancient and mediæval artists who (this author tells us) followed the same principles and nothing more? Will he show us how or wherein Ictinus (for instance) *copied less* from the Doric of others,—or William of Wykeham *less* from the Gothic of others,—or Mr. Paxton *less* from the greenhouses, the columns, the girders of others;—than Mr. Barry from the architecture of others? If Mr. Fergusson will only do this, will only descend from sweeping generalities to particular instances, and show us examples of what he calls "copyism" in Mr. Barry's works, or in modern architecture at large; I will undertake, for every *one* such instance, to find him *two* analogous ones in ancient architecture, and *two* more in modern engineering.

That William of Wykeham and Charles Barry and J. Paxton represent three totally distinct arts, working on fundamentally different principles, none is more ready to maintain than I; but that this word "copyism" affords any test to distinguish them, I must deny. If Mr. Fergusson will but give it a fair trial, he will find it apply (in any sense that is not wholly new) just as much and just as little, to one or another of the three things,—Old Architecture, New Architecture, or Engineering. We builders have long harped upon the word as though we thought it the *Sesame* to open the whole labyrinth of our difficulties; but it is not the golden key: we must look for another.

Meanwhile, allow me to state what seem to me the plain common-sense reasons for what Mr. Fergusson thinks such a pity,—that neither Mr. Barry, nor any other architect, erected the exhibition-house. Firstly, because he was not asked to do so; secondly, because it was not his business; and thirdly, because it was so much *beneath* his business, that no real architect could be expected to stoop to it, and none *would* have done so had he known what would be wanted. The country (supposing, at first, that it wanted a work of *architecture*) invited the architects of Europe to make their suggestions; whereupon those who were "green" enough (chiefly foreigners with little knowledge of English character) did so. We then discovered that we did not want a work of architecture (or at least could not have one), because (among other reasons) *there was not time*, while the designs hung, *to ascertain the practicability or feasibility of any one* of them—I mean any one of those that were *real* architecture, for of course the majority were only sham palaces or sham temples, the majority of modern art necessarily consisting of shams. Well, then, seeing we had no time for architecture, and no more wanted it than the fox did the grapes; seeing we had, like him, mistaken what we wanted, and that the 200 architects had paid for our mistake (I congratulate them, and have no doubt they will be wiser next time); seeing we now wanted not architecture but a packing-case;—not the most *excellent* structure we could contrive for a given purpose with given means, but the *easiest* to fulfil certain conditions,—that most easily proved practicable,—most easily calculated,—and capable of answering its material ends with least expenditure of thought;—this being what was now wanted, Mr. Paxton had the merit of seeing that it was so, and proposing one way of doing it; and as this was the only way proposed, or the only one that there was time to consider, it has been pieced and patched into what may possibly answer the end. But no architect proposed a way, or

ever thought of doing so, because in doing this he would have descended entirely out of his sphere: he would have repudiated architecture, would have renounced the high and distinctive aims of his art, and evaded all its difficulties. Architecture, even the most unambitious, attempts qualities that in this structure have not been dreamt of. Architecture attempts, for instance, the excellence of completeness, of an integral whole so adjusted as to need (like the works of nature) no remedial after-patching. Architecture attempts things higher than keeping out the wet; and that which does *not*, which attempts no more than material necessities, *is not architecture at all*, but simply *engineering*. That it is an essential *part* of architecture, I readily admit. The greater includes the less. Architecture includes the whole of engineering (*statical* engineering) as much as grammar includes the whole of orthography; and can no more exist without it than poetry without language, or painting without brushmanship. Every real architect, therefore, must be both as *able* and as *unwilling* to turn mere statical engineer, as Landseer to turn sign-painter, or a physician to keep a druggist's shop.

I cannot but think it a fact creditable to English architects, and which (whether now appreciated or not) will hereafter redound to their honour, that not one should, in the present juncture, have condescended to degrade his profession by renouncing his art: not one has been seduced, by the prospect of royal favour and the popular fame of an hour, to stoop unsolicited to a task wholly beneath the noble aims of a fine art, and in doing which he would have forfeited his claim to the proud title of artist. It might go worse with architecture yet. I should be very sorry to belong to a profession that could not completely disown the "crystal palace" and all its wonders.

On the other hand, it is to be wished architects would learn more respect to themselves and their noble art, than to degrade it by complaints about their "bread being taken out of their mouths" by those beneath them. Do we ever hear of the sign-painters, how they rob the bread of the Royal Academy? or does Dent complain of the increase of wooden clocks? If England choose to have less architecture, or to do without it altogether, that is *her* disgrace and loss, not *ours*. We may mourn over it, as all earnest men over the brutalising tendencies of a sinking age; but, though it should grieve us, it cannot affect our bread, because, if we be what we pretend, able to do *more* than the age wants, we *can*, at least, do all that it *does* want. No professor of a liberal art has any right to complain on this narrow ground, because, in professing the greater, he necessarily professes the less—the lower—the mechanical parts of his art. If he want bread, let him descend, and instead of doing what he can, do what will pay. The hardship is not of £ s. d. if wholly a matter of taste.

If Landseer and Maclise were obliged, for want of higher work, to paint signs, or the professors at our universities to teach schoolboys, they would have no right to complain about bread, but solely on higher grounds.

Admiring, as I do, the "Historical Inquiry into the Principles of Beauty," &c., it astonishes me that its author should imagine any of his principles carried out in a work repudiating beauty. That architecture can only advance by the same process that advances greenhouse-building or any other art, is a bare truism which we needed no historical inquiry to discover. Growth perfects a sheep: growth perfects a goat: but no process converts a sheep into a goat. Practice and stored experience advance architecture—the same things advance engineering — but no practice can convert one into the other. Improvements in greenhouses or exhibition-houses, though carried on by a succession of Paxtons for 1,000 years, could approach not a step nearer architecture. You might as well tell me that Dent's improvements in chronometers, if pursued far enough by his successors, will produce architecture.

Improvements in construction (even if not arising in architecture) doubtless have their effect on that art; but there must first be the art itself on which they are to act. If structural inventions can of themselves produce new and true art, why did not the *arch* (invented before the Christian era) ever produce this effect till twelve centuries after? When iron shall be made a material for *churches* by men like the monks of the twelfth and thirteenth centuries, zealous for God's glory, and weaned from lower motives,—then, and not till then, will there be a new order of architecture: and it will require no long series of improvements —one generation will suffice.

An order of architecture does not originate out of the temple.

An order of architecture is a great thing: it is that which, itself no counterfeit, is thought worth counterfeiting and sub-counterfeiting for ages.

This is a greater thing than the world for its own purposes can do. Religion has done it in many ages, many climes, and many creeds. The results mutely challenge the world to do the like. The world has not responded to the challenge, and cannot.

I am aware that Mr. Fergusson has the *Times* and all the newspapers with him in calling the "glass palace" architecture. They have no more right than he to call it so. Every one has a right to coin new words—no one to change the application of old ones. Such change is no trifle, for the world is governed by words. However, if right be in this case to yield to might, we may consider that the thing hitherto called architecture has been robbed of that name, it being applied to that which never before 1850 claimed it. We must preserve the *thing* at all hazards, let who will take the *name*. So, if the name has been fraudulently appropriated to something else, it will behove us to find the old thing a new name; for without a name of its *own* exclusively, it cannot subsist. If I might humbly suggest a name for consideration, it would be CALOTECTURE.* E. L. G.

RESOURCES OF IRELAND.

MARBLE AND MINERALS.

WHILST the energy, capital, and enterprise of this great commercial nation are being lavished over every land of the terraqueous globe, it is somewhat puzzling to explain wherefore so little attention is devoted to the elimination of Irish fecundity. In that island the surface is blessed with a soil fertile in the production of all the vegetating varieties of the temperate zones, and the lower stratification abounds in all that is valuable in metallic minerals, coal, marble, granite, with every species of building stone and slate. This profusion of Nature's choicest (because most useful) products is now well known to exist there, and still a repugnance to invest money in Irish speculations obtains to such an extent amongst the capitalists here, that the fairest, the most vicinal, and therefore the most convenient field for adventure, is left, if not wholly untried, at least wholly unprofitable.

Some copper mines have been wrought in Wicklow, and with moderate success. Coal-mines are being worked (and have been for many years) to great advantage in Kilkenny (a central county). Marble quarries exist and have been long worked in the same county. Coal is also found in Antrim, Down, and other counties. Black and green marble quarries have of late been yielding some profit to two English gentlemen, named Franklin, brothers, and the quality of these marbles is much prized for their hardness and for the immense size of the blocks which may be raised, as well as from the beauty of the colour; but, with this latter exception, there is no English mining or quarrying company in Ireland.

Granites are also to be found in mountain masses, ranging over nearly one-half of the island, and fencing with lofty peaks and giant bluffs the margin of the ocean down to several of her best harbours; still this material is rarely used for buildings or for paving, save in the country of its deposit.

Very recently, also, quarries of paving-stone (flagging), in large slabs, which laminate freely into equable flakes of one, two, or three, or more, inches in thickness, and to almost any required superficies, are being worked by the same enterprising English gentlemen: being harder than York paving, it is less absorbent, and is peculiarly adapted for causeways with much traffic, as it dries much sooner after rain, and resists longer the tread of multitudes for city pavements.

The only evidences of the Hibernian Quarry in London are to be seen at Messrs. Franklin's wharfs, Westminster (Whitehall, Cannon-row).

It is true that some few capitalists are now encouraging the manufacture of peat charcoal for deodorization, and for the conversion of London sewage into a fertilising stimulant; but even this latter is the result of (as many may perhaps say it ought to be) Irish enterprise.

Our architects have hitherto imported from Italy or distant lands the materials for the construction of such few marble palaces or churches as we have; and they were constrained to do so, for the existence of that material so near at hand was (if known) not divulged before the present century.

Shafts as large as the columns of the Pantheon might be hewn from the Dalkey Hill, close to Kingstown harbour, and columns of marble, equally large, from the Galway quarries alluded to; but the spirit of the age seems little to favour the grandiose notions of Romans, who transferred the pillars of their temples from Egypt.

The grey and red granite of Scotland has been latterly imported, and forms, when polished, the most ornamental as well as the most durable material for fine elevations in this variable climate. The evidences exhibited in the pilasters that adorn the front of the Conservative Club in Pall-mall, discover the aptitude of these formations for effect and beauty. The same hardness and susceptibility of polish belongs to the Irish granite, but in a much higher degree to the numerous kinds of marble; and now that a taste for ornate designs in domestic architecture seems to prevail, it is to be hoped that some individual of spirit, or some club or company will essay to produce a monument of native skill in diverse marbles of duly interspersed colours, which may surpass one that I have seen in Italy (the church of Sienna), and which certainly left on my memory a recollection rather of the striking than the agreeable kind; for that sacred edifice, with its piebald alternations of black and white in *horizontal lines*, had the effect on my sense of the ludicrous, not dissimilar to the entrance of Mr. Wright on the Adelphi stage with a pair of broad-striped trowsers, representing hoops, round his shanks, or the line of black circles that commonly encompass a gin cask (somewhat misplaced) in an ale-house.

The example of the pilasters in the Pall Mall Club are truly ornate. I will not say so much for the sunken panels in the same material in a Venetian's Piccadillico palace! But what might not be effected if the whole paries were finished, tooled, and polished in the same material?

This last suggestion I throw out as an inducement for architects to send their drawings and scales to Ireland, where labour is exceedingly cheap, so that the blocks might be there hewn, finished, and polished at the quarry; that by such management the specific weight of the requisite material only should be chargeable in the transit: besides that, by such means the cost of workmanship must be vastly reduced and the expense of carriage proportionately diminished, for the packing of blocks to save abrasion could not add much to the outlay in buildings where the cost of the elevation is so little considered. The same design is carried out both in the back and front elevations of the Pall Mall Club-house, so justly admired.

With respect to the stone now in use, Portland or Bath, every lover of architecture must regret the instability not only of the colour, but of the material; and all who have seen the smouldering tracery year by year obliterating

* Mr. H. B. Garling, Mr. Edward C. Hakewill, and others have also forwarded protests against Mr. Fergusson's views.

the elegant designs of our Oxford colleges, must deplore that so many fine achievements have been constructed in these friable fossils; and that the tasteful palace of Lord Ellesmere in the Green-park and the more severe and massive mansion of the Marquis of Hertford in Piccadilly are of so perishable a nature both as to colour and form.

Possibly in our smoky atmosphere the old maxim of "*nimium ne crede colori*" may be good, but I take it that the gloss of polish would resist the deposit of a sooty fog, and that a good shower of rain would be a perfect detergent for unseemly concretions such as those which defile St. Paul's; and it must be here remarked that the upper portion of that *incomparable dome* is nearly as clean as when first chiselled, because perhaps somewhat above the dense vapour, and more exposed to the rain-wash. I have often perceived at twenty-three miles' distance (in a right line) the whole upper portion of that edifice glittering in the sun, whilst the eddying London particular enveloped the whole "*pian' terreno.*"

These remarks may be foreign to materialism, or the nature of the ingredient stone composing our great buildings; but if they show the advantage of polish, if they conduce to encourage labour amongst a now inert and discouraged, because redundant population, they will not prove altogether idle. Whatever increases the industrial habits of a people humanises and refines them, and the money expended on elaborate architecture, whilst it elevates taste amongst citizens of the metropolis, must in this wise extend the advantages and comforts of improvement to the long-sunken peasants of Ireland. QUONDAM.

DOCTORING DAMP WALLS.

I was much interested in your article of the 4th January, in regard to "Doctoring Damp Walls." In this country (N.B.) we have principally a damp stone-clay slate and its varieties to build with, and with an average of about sixty inches of rain we find *damp* a little difficult to deal with. This stone is both *u et* and *damp;* that is to say, it often has flaws, which admit rain when driven by storm through apparently solid stones of two or three feet, which perhaps show no crack when dry; and, on the other hand, even in internal walls, and in pavements, though laid hollow, it "*sweats,*" as it is technically called, on some changes of weather. This is principally to be explained, I believe, by its being a *bad conductor of heat,* and therefore condensing moisture from the warmer air on a sudden change of weather, as a bottle of cold water does when brought into the air of a warm room.

Many years ago I tried the receipt for a "mongrel cement," as you call it, of tar, with kitchen grease, glass, and lime. I laid it on the inside of a wall and plastered on it, and except in one very small spot, the room has been perfectly dry ever since. I may mention that not having a very large supply of kitchen grease, I substituted "*grease* butter," such as is sold for sheep-smearing; and though I thought I had more broken glass than most private individuals, I was constrained to seek a substitute, which I found in smithy-ashes, or rather in *slag* from the forge. I have, however, since tried this in a large room close to the sea-side and a good deal exposed, but not built of slate-stone, but of a compact, flinty white limestone, containing a good deal of iron, and pointed with Roman cement. This is occasionally very damp. I also tried it on the inner face of the walls in our prison cells, which are of slate-stone and similarly exposed to the last. Here it has done much good, but the plaster still shows damp occasionally. I was told it had been much improved by washing with soda.

I made several small attempts at laying *asphalte* on the outer face of a wall, sometimes by dashing it on as in bailing, sometimes by pouring it into a sort of mould formed with wood or slate, or an iron plate: these, in many instances, adhered so strongly that they could not be got off entire: the dashing is also very troublesome to do, and I suspect that, however put on, asphalte could not be trusted on the *outside* of a wall exposed to the sun, even in latitude 56°. Some years ago a very intelligent friend, now, alas, no more, recommended me to try doing my walls with a lather of soap and hot water, and, as soon as dry, sprinkling them with a saturated solution of alum. We prepared several places in this way, and, for many months, the effect was extraordinary—water, poured on the stone, running off as from a duck's back, without affecting it in the least, though the unprepared stone turns as dark as a slate as soon as wetted. I believe, however, that the effect of this is quite worn out, though my friend told me that he had done a church all over in some part of England, and that the operation had been effective for, I think, seven or eight years. I have heard of this as a plan for waterproofing cloth, and believe that this, or the similar plan of mixing alum with sugar of lead, and dipping cloth in it, was the plan for the application of which to the fleece on a sheep's back the late Mr. Smith, of Deanston, was taking out a patent when he died. I have since seen that a patent for a similar purpose was taken out by some one, whose name I forget.

I was unfortunately persuaded by an English builder to make an addition to my house of brick, under the idea that when properly cemented outside it was to be free both from wet and damp. I cannot complain of it as regards dryness; but I find it impossible to keep a respectable-looking *face* upon it. The plan we tried at the outset was very nearly one of the receipts you give: it was 1 cwt. sand, 8 lbs. litharge, 8 lbs. whitening, mixed with sufficient *raw* linseed oil to be workable. This makes a sand putty, which turns extremely hard, and bears a beautiful face. We also used it as a finishing instead of stucco on many internal walls with great success. Its first failure was near the ground, where it peeled or flaked off the second or third season. The more exposed face soon after began to come off, principally from below the projecting stone mouldings and copes, which were fine sandstone from the Garecube quarries. It still remains, after fourteen or fifteen years, on the more sheltered parts; but failing even there in patches. We have since tried Roman cement with very little success; then Arden lime (a sort of Scotch Roman cement), which has been little better; and now I should be glad to try almost any reasonable suggestion. I have often thought of facing it with stone; but this, to look well, must be carried up extremely thin, so as not to cause the building to project much, as it is in a line with the older (and some newer) stone building. I have thought of tile facing, and even of trying a fusible cement, to be laid on with a blow-pipe. If you or any of your correspondents can suggest the best cure, I shall be not a little grateful. The building is about 30 feet high, by 60 long, with a 12 feet projection of 6 feet in the middle, and with about 20 inch octagon angle columns both at the extreme ends and at the angles of the central projection. I may add, that Glasgow bricks are not exactly the best in the world, and have very little suction in the surface. In some cases where I had used them for internal walls, and plastered upon them, the walls have been very damp. I cured one of these completely some years ago with india-rubber lining, but it was both troublesome and expensive.

In these cases we blamed sea sand for the dampness of the plaster; but in the outside sand putty we used nothing but pounded free-stone shivers, in order to avoid this supposed danger. I intended to have written, as you say many correspondents have done, to ask the proportions of your proposed recipe. I see them in your paper of the 18th, and hope to give them a trial, and to report the result. I wish, also, that any of your correpondents could inform me how far gutta percha pipes are successfully used for bringing in water under pressure; and whether, when laid in the ground, they require protection from either mechanical or chemical injury? I see notice of a patent for the use of *lime* to improve and preserve gutta percha. In many instances I have heard of lime (in mortar) attacking and corroding lead when laid in it.

HYPERBOREAN.

UNION OF ARCHITECTS AND ENGINEERS.

In the course of the discussion at the Institute of Architects, on the 13th ult., Mr. Tite lamented the separation of the two professions, which, he said, had been identical until within the last few years,—so few, indeed, that many there could remember men who had practised successfully in both, and had united in their persons the characters of architects and civil engineers, and it seemed to me to be a prevailing cause of regret among the majority of the Fellows and Associates of the Institute that the breach was every day widening, and that petty rivalries were springing up between members of these twin professions, whose common object ought to be the advancement, and, if possible, the perfection of the various branches of constructive art, by finding the means of obtaining the *maximum* of strength with the *minimum* of materials, and of adorning, as far as practicable, according to the rules of architectural beauty, the almost innumerable structures which the requirements of this advanced age have called into existence.

With a view to make engineers and architects work more in concert for the future, and enable them to profit by each other's experience, I venture to make some suggestions which, if carried out, would, I feel convinced, be of the greatest advantage, both to themselves, individually and collectively, and to the public. Allow me then, sir, to propose, through the medium of your useful periodical, that the Institutions of Architects and Civil Engineers throughout every country, should agree *de part et d'autre*, to admit members of the sister profession to an *ad eundem* rank or grade, without going through the form of electing them *de novo*. For instance, if a member of the Institution of Civil Engineers was desirous of becoming a fellow of the Institute of Architects, or *vice versâ*, he should be admitted *ad eundem*, and should enjoy all the rights and privileges which he had obtained in his own Institution. In the same manner, Associates of the one should have the option of becoming Associates in the other: thus the professions would interchange valuable ideas for their common good, identify themselves with each other's proceedings, and they would thus mutually assist, by their combined labours, in raising monuments of their skill which would surpass all that has yet been achieved, and would remain as lasting memorials of the superiority of mind over matter, graced with the legitimate adornments which taste and refinement would appropriately supply.

Of course I do not say that building churches and houses, &c., comes within the province of the civil engineer, any more than constructing a railway, making a harbour, or erecting a lighthouse could properly be said to come into the category of an architect's ordinary avocations: still I do think that much more might be done were the professions more closely allied. Each engineer—each architect—has his own business to carry on separately and independently of the other members even of his own profession. Yet he finds an advantage in meeting his professional brothers at the institution to which he belongs—reading a paper, discussing some subject of general interest, hearing opinions volunteered, and obtaining useful hints to guide him under similar circumstances for the time to come.

And while I propose this co-operation between engineers and architects, I would strongly urge upon them both to agree upon some plan of keeping their professions select, by devising a means for preventing the intrusion of interlopers, and I think the way to act under present circumstances is to recognise the claims of *all* who *now* exercise the calling of either engineer or architect, irrespective of their past history; to look upon their introduction into the profession as a *fait accompli*, and to have a list of such persons forthwith made out; but

to determine that for the future no one shall be considered an architect or engineer who has not been duly admitted a member of the profession by such *form* or *diploma* as may be agreed on. No other course, I feel satisfied, could be taken in this matter now, as no decision whatever which may hereafter be come to could with justice or propriety be made to have an *ex post facto* operation. We could not, it is true, nor would we wish to, have excluded Telford, or Rennie, or Stephenson, although one was a stone-mason, the other a millwright, and the last a collier. These were among the greatest ornaments we can boast of. Our profession was, however, in their time, comparatively in its infancy, and should such men again come on the stage, an honorary degree would be given to them as the LL.D. was given by the universities to Dr. Johnson and other great men. Such master-minds are ever able to raise the temples of their own fame by the assistance of an innate genius which helped them to overcome every obstacle, to surmount every difficulty, to find in the originality of an exhaustless intellect an abundant supply of those resources, stratagems, and inventions which alone could have enabled them to raise up the most stupendous structures—triumphs of engineering skill—in defiance of the tempest-tossed waves of the ocean, the trackless and burning sands of the desert, the dread impetuosity of the swollen river, or the secret and sudden action of the shifting quicksand.

Wm. H. Villiers Sankey.

NOTES IN THE PROVINCES.

Some delay has occurred in putting the Adelaide window at Worcester into the hands of an artist in consequence of an objection made to the one selected, namely, Mr. O Connor, that he is a Roman Catholic. The son of Mr. O'Connor was suggested, as he is a Church of England man, but Mr. O'Connor, Jun., though ready to undertake the task, and having "very little connection with his father," frankly stated that "he would be sorry to be deprived of his professional advice." Both of these gentlemen were, therefore, rejected, and the question now stands between Mr. Wailes and Mr. Roger. The subscribers are to vote by letter on this question.——Efforts are being made to establish a school of design in Worcester.——There appears to be now an assurance that the school of design at Stourbridge will soon be placed on a permanent basis by help of the sum of 100*l.* per annum granted by the Government in aid of it, besides 150*l.* for patterns, models, &c. A meeting, presided over by Lord Ward, was to be held on Monday last.——The bronze statue of Sir William Nott is now in course of erection at Carmarthen, under the superintendence of Mr. Davies, of that town, sculptor, and Mr. Collard, the town surveyor. It is not to be inaugurated till the Spring Assizes.——An application, signed by Messrs. John Clayton and James Bell, architects, was some time ago made to the Ecclesiastical Commissioners, for leave to convert the Prebendal Church of Christchurch at Brecon into the parish church of St. David's, Llanfaes, the present church of St. David's being both inconvenient and ruinous. Considerable restorations would be required in the Prebendal Church itself, which is also in a bad state, but is said to be much more favourably situated, as well as possessed of more architectural interest and pretension. Mr. Clayton, in recently drawing attention to this application in the *Hereford Times*, alludes to a statement made by Sir Benjamin Hall's agent, to the effect that "the nave (of the Prebendal Church) is used as a horsefold, and the cemetery as a circus," and denies that it ever had either nave or cemetery, the ruins adjoining being those of an ancient Roman Catholic convent.——Endeavours are being made by the Roman Catholics of Liverpool to erect, with the aid of Government and by subscription, a school for children of Roman Catholics in the district of Holy Cross. A school for 1,500 is said to be wanted. Mr. Allan Kaye subscribed 100*l.* at a recent meeting.——Some time since the price of gas was reduced at Rugby, and it is now announced, that in consequence of the increased demand for gas by private consumers, the mains have become quite inadequate to supply the place, so that the consumers are on short allowance till a plan be decided on.——The new church erected at Clay Cross, and consecrated on 25th ult., is in an incomplete state, and consists of a nave of four bays, which, with the side aisles, is 56 feet long, and 43 feet wide; a chancel 22 feet long, by 16 feet wide; and a western tower 14 feet square within, open to the nave by a lofty arch. The tower is intended to have a broach spire, and the entire height will then be 125 feet: it is temporarily roofed in at the ridge of the nave. Preparations are also made for the erection of a south porch, and a vestry on the north side of the chancel; but the above with the spire are unavoidably suspended for the present, in consequence of great deficiency in the funds. The church is completed internally, and is capable of seating 450 persons, including children. It is designed in the simplest form of the style of the twelfth and thirteenth centuries. The east end of the chancel has a three-light transition window: with that exception, there are no ornamental details. The architect is Mr. Henry I. Stevens, of Derby. The contract for the building alone was taken by Mr. Samuel Watts, of Derby, and Mr. Kirkland, of Clay Cross, at about 2,100*l.* The building stands near to the Chesterfield and Alfreton turnpike-road: it is dedicated to St. Bartholomew. Clay Cross is now quite a manufacturing town, with a population of 2,509 souls.——The twenty-four sets of competition plans for the new market-house at Bolton are now open to public view in the Baths Assembly-room there.——The interior of St. Mary's Church, Andover, has been improved by stained glass in the two windows facing the northern and southern aisles.——A monument to the memory of the late Earl Talbot has been erected in the parish church at Ingestre. It consists of an altar tomb, with a recumbent full-length colossal effigy of the earl. The work is by Westmacott.——Sir John Barrow's monument, so lately erected at Ulverstone, was, on 30th ult., struck by lightning, which partially destroyed the cupola and damaged other parts of the building. After the many instances of such casualties, it is matter of surprise and regret that early means are not resorted to for guarding such structures against the destructive effects of atmospheric electricity.——The foundation-stone of a Surgeons' Hall and Medical School was to be laid at Newcastle on 6th inst.——The Derby Water Works Company are now supplying a portion of the public with water on the "constant system." The humbler class are shut out completely from all participation in this advantage by an oversight of the directors, who seem desirous of reviving the late policy of the "gas merchants." The price for one tap for domestic purposes is 16*s.* per annum. For the artisan it is a prohibitory price.——It is intended to erect a new school-house (in connection with the church) at St. George, Gloucestershire. Style, middle pointed. Mr. P. E. Masey, architect. Wm. S. Monks, builder.

Liverpool Architectural Society.—At a meeting of this Society in the week before last, Mr. T. D. Barry (in the chair) opened the general business by directing attention to a subject which had been brought before the profession and public of London during the last few weeks. He alluded to the Board of Health surveys, which, he complained, were monopolised by the stipendiary hangers-on of the Board of Ordnance. The surveyors of London, many of whom were architects, were memorialising against the monopoly; and the co-operation of the profession in the country was solicited. Mr. Joseph Boult, who had, at the last meeting, given notice of a motion for taking into consideration the proposed amendment of the Building Act, postponed his resolution until the next meeting of the Society. Mr. Huggins read a paper on "Expression in Architecture."

CAUTION TO BUILDERS.

COLLYER *v.* DAVEY.

An action was tried last week at the Clerkenwell County Court to recover compensation, in damages, for injuries sustained by the plaintiff, who is a messenger at the Mansion House, and has been several years in the employ of the Corporation of the City. The defendant is a builder, and the owner of several houses in Rydon-street, New North-road, Islington. The damages were laid at 40*l.*

The facts are as follow:—On the 10th of September last, the plaintiff was proceeding along Rydon-street, with the intention of visiting a fair which was held in the immediate vicinity. The street, which was in an unfinished state—the areas not being railed in—was thronged with persons, and the plaintiff was accidentally pushed down one of the areas, his leg being severely fractured from the effects of the fall. The accident was of a very serious nature, and plaintiff was conveyed to St. Bartholomew's Hospital, where he remained for a period of nearly two years.

Mr. Parry, for the plaintiff, submitted, upon the authority of *Lynch* v. *Marden* (2 Queen's Bench Reports, p. 29; 5 Roscoe, p. 373), that, notwithstanding the injury which the plaintiff had sustained was the result of accident, and had occurred in the manner described, the defendant was liable for the consequences. In the case which he (the learned counsel) had referred to, and which was most elaborately argued, it was held that the defendant was liable, in damages, for the negligence of his servant; Lord Denman observing, that whatever negligence there might have been on the part of the plaintiff, it sank into insignificance compared with the negligence of the defendant's servant.

Mr. Wakeling, for the defendant, having taken several legal objections, which were overruled, addressed the Court in mitigation of damages.

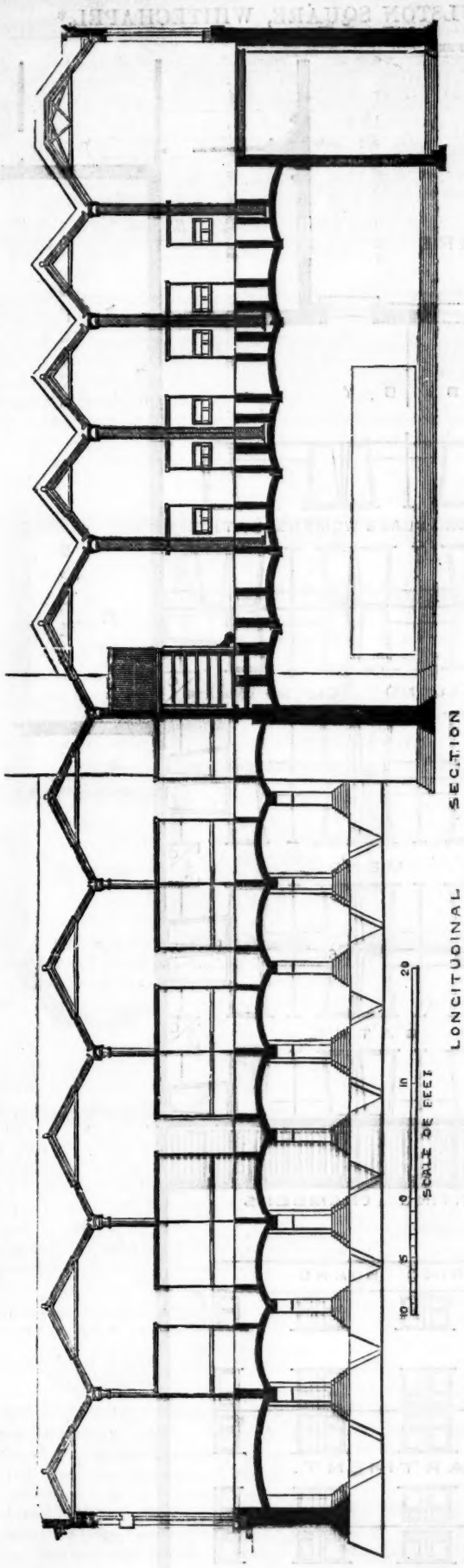
His Honour observed, that there was not a word of blame to be attributed to the plaintiff, who had evidently met with a very serious injury. A person leaving areas in such a state as that which had been deposed to, was guilty of great negligence, and the negligence in this case was the more culpable, the defendant having received a previous caution. It was perfectly immaterial whether the plaintiff was pushed by another person: the party through whose negligence the accident occurred was liable, in law, for his negligence. He (his Honour) did not feel justified in assessing the damages at less than the amount sought to be recovered: his verdict must, therefore, be for the plaintiff, and he would make an order for payment in fourteen days.

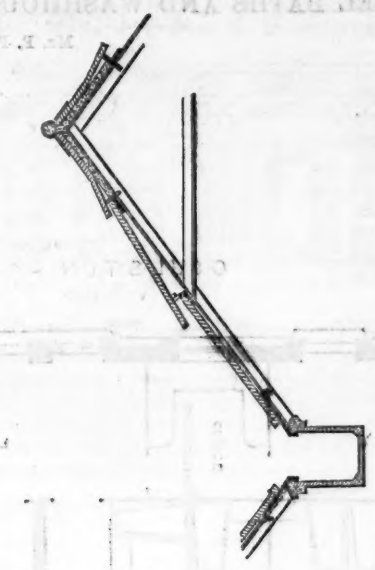
LIGHT IN BUILDINGS.

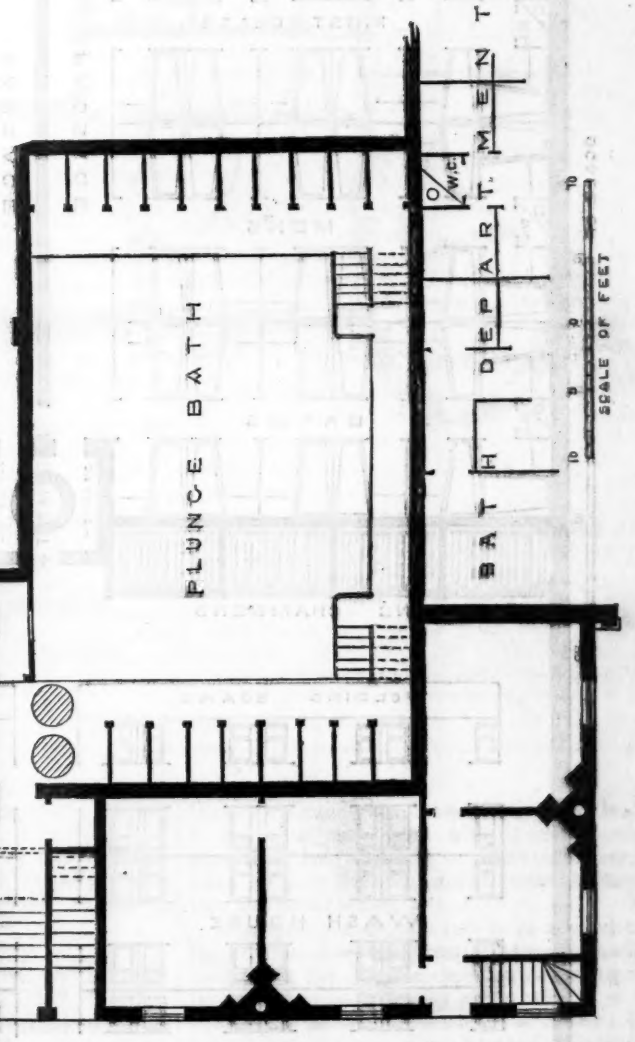
The repeal of the Window Tax, and the amending or remodelling of the Buildings Act, should be effected at the same time, so that clauses may be introduced into the Act fixing the *minimum* areas of window surface in proportion to the sizes of rooms of all other erections to be built or rebuilt in future, and making it imperative that all existing windows which do not admit sufficient light to rooms should be enlarged. In order to determine what is the least amount of window surface necessary to light different sized rooms in different situations, many of your numerous professional and other readers and correspondents will probably be induced to give some information. J. P.

How the Working Classes have appreciated an Exhibition of Pictures.—During the eleven days the rooms of the Society of Artists were opened, six thousand four hundred and fifty persons visited the Exhibition, and it is almost superfluous to add that in no instance was there the slightest departure from the strictest decorum. The success of the experiment, however, must not be measured by the attendance, because the number of visiters was only limited by the capacity of the rooms, and in the evenings they were crowded to excess, many persons waiting outside for an hour before they could gain admission.—*Birmingham Journal.*

THE MODEL BATHS AND WASHHOUSES, GOULSTON SQUARE, WHITECHAPEL.*







[* See page 83 in our present number.

CAST IRON COLUMNS AND ANGLE SHOPS.

It is no uncommon thing to see a superstructure, at the angle corner of a street, some three or four stories in height, supported on a few slender *cast*-iron pillars, these being the only points of support. The extremely *fraugible* nature of cast-iron, arising from its crystalline character, must render this an exceedingly vicious principle of construction.

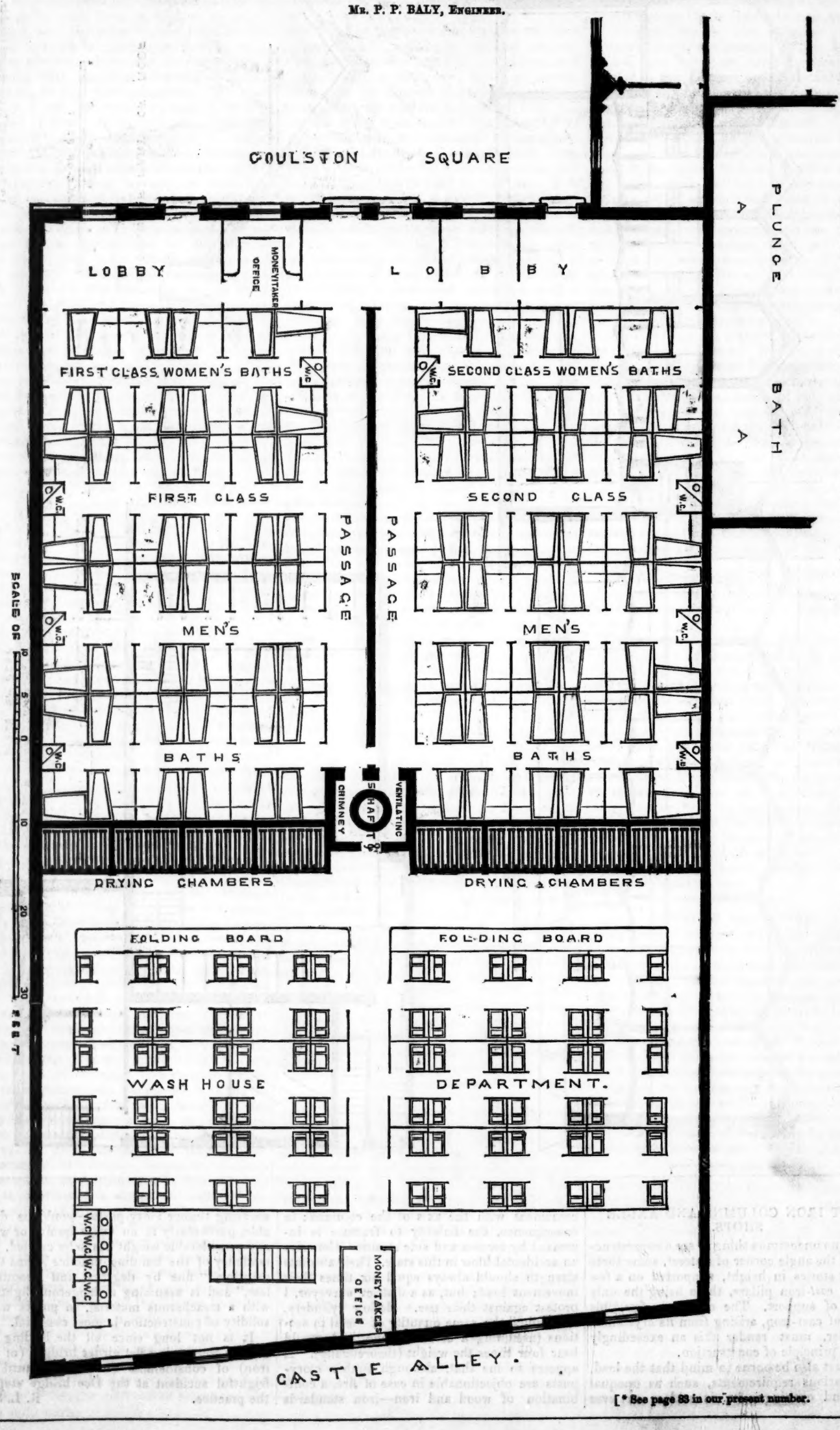
It must also be borne in mind that the load, from various requirements, such as unequal piers and openings, &c. is seldom or ever coincident with the axis of the columns: in consequence, the liability to fracture is increased by torsion and side strains. Conceive an accidental blow in this state. Their absolute strength should always equal six times their movement load; but, as a district surveyor, I protest against their use. Hollow cylinders, containing the same quantity of metal in sections (assuming a certain proportion), would bear four times the weight (theoretically). It appears to me that, although timber story-posts are objectionable in case of fire, a combination of wood and iron—iron standards encasing timber story-posts—would be desirable, particularly in an angle quoin, or where any considerable weight has to be carried. The tendency of the building practice seems to be growing "fine by degrees and beautifully less," and is assuming a dangerous lightness with a treacherous material, in points where solidity of construction is most essential.

It is not long since all the leading engineers were using flat girder bridges (of cast iron) of considerable dimensions, until the frightful accident at the Dee bridge stopped the practice.

R. L. S.

THE MODEL BATHS AND WASHHOUSES, GOULSTON SQUARE, WHITECHAPEL.*

MR. P. P. BALY, ENGINEER.



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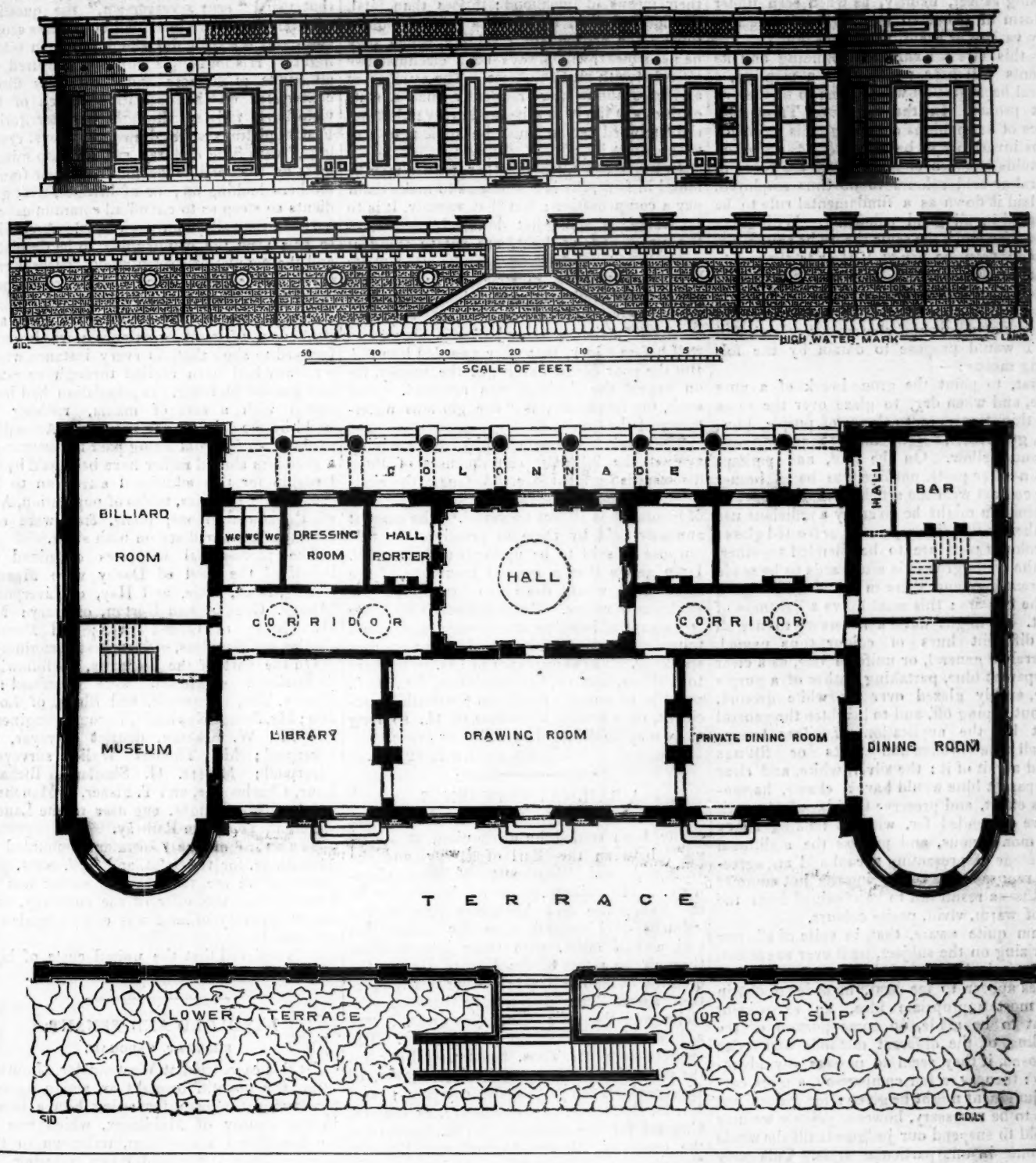
THE ROYAL IRISH YACHT CLUBHOUSE, KINGSTOWN.—MR. J. S. MULVANY, ARCHITECT.



THE ROYAL IRISH YACHT CLUBHOUSE, KINGSTOWN.

THE Royal Irish Yacht Clubhouse, Kingstown, county Dublin, of which a view of the water front and a plan are annexed, has been lately erected from the designs of Mr. J. S. Mulvany, architect. It is situated near the terminus of the Dublin and Kingstown Railway, from which a good view of the building is obtained. The exterior of the building is executed in Roman cement. The principal entrance is in the elevation facing the railway, in the centre of a colonnade, composed of eight Ionic columns, 15 feet 3 inches high. In front of the marine elevation is a terrace, supported by a substantial retaining wall, composed of hammer-dressed black stone, with cornice supported on cantilever blocks, surmounted by a parapet of granite. This terrace was designed for the purpose of affording the members and their friends an opportunity of witnessing the regattas which take place in the harbour; and a portion of the roof of the clubhouse is constructed flat, to serve as a platform for the same purpose.

The following are the dimensions of the principal rooms:—Drawing-room, 43 feet 6 inches by 21 feet; dining-room, 36 feet by 19 feet; library, 23 feet 6 inches by 21 feet; museum, 28 feet by 19 feet; billiard-room, 25 feet by 19 feet; hall, 24 feet 6 inches by 20 feet; and committee-room, 20 feet by 11 feet.

THE DECORATION OF THE BUILDING FOR THE EXHIBITION.

ECONOMY being the chief recommendation in the use of the materials of the present building, to look for any thing like symmetrical design or artistic beauty, is to expect, probably, what never entered into the mind of its originator to supply. Nor could it well be expected: necessity demanded a building of enormous length, rendering a harmonious proportion of due height next to impossible. Iron bars are employed in the most simple forms, in reference to their geometric strength rather than their architectural beauty. It seems necessarily to follow, that any fantastic display of decoration of these simple forms would be a violation of all consistency; yet I would not infer that no kind of embellishment is at all admissible, provided it can be given with a due sense of propriety. The ancient Greeks well understood this principle: indeed, it seems to have been with them a great governing law, which is so abundantly exemplied by their beautiful works, both in sculpture and architecture.

If propriety, then, is a rule to be applied to the decoration of this great building, it would follow that the metallic character of its structure ought to be inviolably preserved.

Merely a pleasing assemblage of colours is not all that is required in suitable decoration: there is a higher principle, more connected with the mind, that has to be considered, as in this instance. The known properties of metal convey to us the idea of strength, and a sense of security wherever it is employed. Only let us be impressed with the idea of danger, by standing under an expansive roof, sustained by what appears to be slight and narrow columns of wood, and the pleasure intended to be conveyed by their outside decorations of colours, would be more than counteracted by this irresistible impulse of our nature.

Conceiving, then, that to preserve the appearance of metal is essential, the obstacle to be overcome is to find one of a proper colour: as those of a yellow or green tinge do

not seem admissible, it seems that the only one available is that which is already employed, requiring only to have imparted to it its most pleasing aspect, namely, as when seen under the form of tempered steel, when it receives every variety of beautiful neutral tint.

If this Great Exhibition Building and its contents will bear analogy to a painting, a neutral back-ground would seem to be the one most proper. In the works of Titian (the prince of harmonious colouring) this principle seems invariably to be adopted. Sir Joshua Reynolds has also commented on the value of neutral or cold colours to be thus employed, and laid it down as a fundamental rule to be observed in all good colouring. With these authorities, and if the same theory be applicable, it would then be asked, "How is the end to be accomplished?" I have just hinted that the object of imitation is a steel colour, of a light hue, from its seeming to possess all the elements of colour and character required, and this I would propose to obtain by the following means:—

First, to paint the groundwork of a pure white, and when dry, to glaze over the same with thin, transparent colour, of purple, blue, grey, green, &c., heightening, if required, with red and yellow. On the roof, and perhaps certain other parts, not likely to be in immediate contact with the articles, a high degree of illumination might be given by a judicious use of either tinfoil, silver, bronze, or frosted glass: the colours used are to be blended together, and the white ground is afterwards to be made apparent here and there in streaks, by wiping off the colours: this would give a lightness of effect. It might not be necessary to use all the different hues of colour thus named, —merely a general, or uniform one, as a clear transparent blue, partaking rather of a purple tinge, evenly glazed over the white ground, without wiping off, and to heighten the general effect by the application of silver bronze on all the ornamental parts or fittings would admit of it: the silver, white, and clear transparent blue would have a chaste, harmonious effect, and preserve the idea of strength I have contended for, without looking heavy and monotonous, and possess the additional advantage of presenting a cool and an agreeable repose to the eye during the hot summer months—a result not to be obtained from the use of warm, vivid, posite colours.

I am quite aware, that, in spite of all our theorizing on the subject, be it ever so correct, it can only be proved by its results; and it does appear to me that, in order to obtain the most appropriate idea, an experiment ought to be made, on some portion of the building, of the different methods and styles proposed, if they seem to possess any advantages: then, in a fair comparison, a more correct judgment might be given; for it does not seem to be necessary, however politely we may be told to suspend our judgment till the whole is done in one particular style. This may answer the purpose of closing the mouths of many, but will not satisfy the understanding of others: a small portion done would suffice to show the relative merits of each, and lead to the adoption of such as would not hazard the character of this great national work.

An Artist.

INSURANCE OF OPERATIVES AGAINST ACCIDENTS.

In your last paper you noticed the accidental falls from scaffolding, ladders, buildings, &c., which required treatment and received medical care at the Charing-cross Hospital during the past year, and you expressed some surprise that they should have amounted to so large a total as 3,200. This amount may seem considerable to any one whose attention has not been specially attracted to the subject, but it probably does not represent a tithe of the number occurring in this town. I need only cite in evidence the monthly returns of one other hospital, viz., the London Hospital, where, in December last, there were 772 cases of accident, which is at the rate of 9,264 in the year, in that establishment alone. And the rest of the metropolitan hospitals, of course, furnish their proportionate contingent.

Now, an accident is an expensive matter to a poor man. If fatal, it costs the surviving family the better part, or perhaps the whole, of their means of livelihood: if less than fatal, the loss of time, that is, the loss of money, during the consequent disability, which may be permanent, will always be a circumstance attended with much distress. The number of accidents shows how frequently such a state of things is likely to arise, and every reflecting, right-minded person must be anxious to provide against it.

In some cases, where other parties may be found in fault, the law professes to make them pay a compensation; but that remedy, it is to be feared, is somewhat doubtful. Many, of the unlearned, at least, are apt to think it worse than the complaint. There was a cause tried the other day, in which an unfortunate actor, having fallen through a hole in the floor at a theatre, and broken his leg, sued the manager for damages, and played his part so well before a jury, that they awarded him 30*l.* But the poor fellow never got the money, for on appeal the decision was reversed. And such, too frequently, is "the glorious uncertainty of the law."

The best means, no doubt, of providing against the injurious consequences of these disasters is by insurance. Amongst the wealthier and more educated classes the practice of insurance is all but universal.* The amount annually paid by them in premiums for this purpose is said to be upwards of 5,000,000*l.* I am aware that a general insurance of the same kind would draw too heavily on the workman's wages. But it appears that there is a means of insuring at a cheaper rate against those sudden calamities of which we are now speaking. The annual sum of 15s. will insure to builders, masons, house-painters, &c., 100*l.*, payable to a man's family on his death by accident, or a weekly allowance of 1*l.*, so long as he may be disabled by a similar cause.

An Insured.

* Not nearly so much so as it should be.—Ed.

A RAILWAY REFERENCE.

A case of considerable importance has recently been settled by arbitration, at Liverpool, between the Earl of Derby and the Liverpool and Southport Railway Company. The railway, from its junction with the Lancashire and Yorkshire line in the suburbs of Liverpool, runs for about two and a half miles, with some interruptions, through the estate of the Earl of Derby, the quantity of land abstracted being nearly fourteen acres. The discrepancy between the claim and the offer being very great, it was agreed to leave the matter to arbitration. The referees were Mr. Thos. Statter, of Bury, on the part of Lord Derby; Mr. J. A. Picton, of Liverpool, on the part of the company; and Mr. D. Bellhouse, of Manchester, as umpire. Counsel for the claimant, Mr. H. Segar; for the company, Messrs. Aspinall and Pollock. The viewing of the land, and taking the evidence, occupied thirteen days, a prodigious number of witnesses being examined on both sides.

The claim of Lord Derby was originally 40,000*l.*, but raised by the professional witnesses to upwards of 50,000*l.* The offer of the company had been 18,000*l.*, subsequently raised to 20,000*l.*, but the estimates of their valuers ranged from 10,000*l.* to 18,000*l.* The cause of this enormous difference may be told in very few words. A great part of the land is in that transition state between agricultural and building land, which renders its value dependent on such a variety of circumstances, contingent and prospective, as to reduce its present estimation in a tangible form to the state of a mathematical "surd," or unresolvable quantity. Whilst many of the claimant's witnesses considered that a high value, as building land now available, should be affixed, other learned mathematicians (retained on the other side, of course) were of opinion that ages must elapse before building could by any process be attracted or coaxed into the neighbourhood. Some thought that a more delightful situation for villas could not be found. Others considered that it was only fit for cottages, manufactories, and nuisances of all sorts.

The great bone of contention, however, was that usual "*crux surveyor-um*," the question of severance. Here imagination had free scope, and never probably did she indulge in wilder flights. His lordship's witnesses conjured up all kinds of horrors and "chimeras dire" consequent on the desolating march of the victorious railway through his territories. Fearful pictures were drawn of "level crossings," with little children cut up into mincemeat by the terrible locomotives, their frantic mothers looking on; or of bridges, with gradients so steep as to cut off all communications between the valleys on each side. According to this view the country was to be desolated and the population driven away. These dreadful calamities were to be atoned for by a payment for severance of 38,000*l.*

The picture was by-and-bye reversed, and gentlemen of great experience were brought forward to show that, in every instance where a railway had been carried through an estate laid out for building, the population had been seized with a sort of mania, rushing to build by the sides of the railway. According to them, so far from being paid for severance, a premium should rather have been paid by his lordship for this additional attraction to his property. Statistics, tables of population, Acts of Parliament, maps, plans, &c., were employed as light artillery on both sides.

The professional witnesses examined on behalf of the Earl of Derby were Messrs. Young, Reed, Ellis, and Hay, of Liverpool; Messrs. Grundy and Gorton, of Bury; Mr. Hutchinson, of Over-Darwen; and Messrs. Cawley and Brunlees, of Manchester, engineers.

On the part of the company, the following professional gentlemen were examined:—Messrs. Tite, Hammack, and Shaw, of London; Mr. James Newlands, Borough, engineer, and Mr. W. Kishton, district surveyor, of Liverpool; Mr. Thomas Wylie, surveyor, Liverpool; Messrs. G. Shorland, Richard Lane, Charles Lee, and T. Fisher, of Manchester; and Mr. Wright, engineer to the Lancashire and Yorkshire Railway.

The award of the arbitrators amounted to 23,293*l.* 9s. for the land, and 800*l.* costs. In effect (as we are told) this is rather less in amount than the offer of the company, as a larger quantity of land was comprehended in the award.

It is believed that the united costs of both sides will not amount to less than 3,500*l.*

LANDLORD AND TENANT.

KEATES *v.* CADOGAN.

In this case, tried at Westminster, January 20th, the plaintiff brought an action against the Earl of Cadogan, for letting him a house in the county of Middlesex, which was in so dilapidated a condition, unknown to the plaintiff, that it tumbled down, injuring his wife, and damaging his furniture. The declaration set out these facts. The defendant pleaded not guilty; that the house was not in a ruinous state; that the defendant did not know that the house was in such a condition; that the plaintiff had full knowledge of the condition of the dwelling-house; that the defendant did not know that the plaintiff was not cognizant of its condition; and that it was not the defendant's duty to give the plaintiff such information regarding the house. On all these pleas, except the last, the plaintiff joined issue, and to the last he specially demurred, on the ground that the plea put in issue matter of law,—the "duty" of the defendant, under such circumstances, being a question of law.

The Lord Chief Justice in delivering judgment said, the difficulty was that the declaration did not disclose a sufficient cause of action. It was not pretended that there was an implied warranty on behalf of the defendant that the house should be fit for immediate occupation, but it was said that because the defendant knew that the house was in a dangerous state and might fall down, and did nothing whatever to apprise the plaintiff of that fact, therefore he was liable to the present action. The fact

might have been that the defendant knew the house was in the state described, and the plaintiff might have come and said, "I wish to take that house: I have not seen it;" and the defendant, knowing its condition, might have said, "Yes, I will let it to you." But the declaration did not say either that the defendant made any representation to the plaintiff, or that the defendant was aware that the plaintiff would not do what persons ordinarily would do in such a case,—namely, before he began to occupy the house make a proper investigation as to its condition himself. This, therefore, appeared to be a mere ordinary case of letting. There was nothing to show deceit, and therefore in the declaration no cause of action was described.

Judgment for the defendant.

MR. LAYARD'S RESEARCHES IN ASSYRIA.

THE funds placed at the disposal of Mr. Layard by the British Government being exhausted, that gentleman has been obliged to abandon several new excavations which he had commenced at Nimrud and at Nebbi Junas, and which promised to lead to historical discoveries of the utmost importance. He has now proceeded to Babylonia, for the purpose of examining the various ancient sites that are scattered over that extensive country, and with a view of ascertaining the spots most favourable for excavation.

As this object, however, is one of national rather than of individual interest, it is thought that there are many in this country who would regret to see the expenses of the work thus thrown upon Mr. Layard, and who would willingly come forward with pecuniary aid, in order to relieve him from personal liability.

Mr. Murray, of Albemarle-street, will receive any such contributions, and will take the necessary steps for transmitting to Mr. Layard the sum subscribed, to be expended by him, during the ensuing winter, in Babylonian or Assyrian excavation, according as circumstances may render advisable.

A DEFENCE OF IMITATION.

IN your journal of the 1st inst. an attempt has been made by a correspondent to overturn a defence of imitations of woods and marbles, as practised by house painters in this country, which formed part of a paper on Ornamental Art as applicable to the Internal Decoration of Houses, prepared by me, and read at a meeting of the Architectural Institute of Scotland, an abbreviated report of which appeared in THE BUILDER of the 18th ult.

Your correspondent accuses me of blasphemy for having, by way of showing the absurdity of the objections made to imitative art employed in house decoration, stated, that the concavity of heaven—the rainbow itself—was a deception. It would appear that "Calotect" had consulted Johnson, and found that "deception" was to "lead into error." Had he pursued his inquiry a little further, he would have found that "deception" meant "counterfeiting" or "imitating," and he would thus have seen the connection the comparison has with my argument, in support of the imitative arts, in such a light as might have induced him to dispense with using the ridiculous term of blasphemy.

Man is an imitator and adaptor; he is neither an inventor nor a creator; and if the arts wherein imitation is practised are set aside, I should feel obliged by "Calotect" informing me where professors of the fine and decorative arts are to find material on which to exercise their adaptive faculties. Is not blasphemy a fitter term for him who, fancying himself a creator, shuts his eyes to the beauties of external nature, and disgusts the world with monstrosities in the name of designs, than for the true student of art, who diligently watches every phase of nature, and whose highest aspirations are to imitate humbly the beauties with which God has so richly adorned the work of his own hands.

"Calotect" does not assert that the concavity of heaven and the rainbow are what they appear to the eye; neither will he attempt to affirm that the sun, the moon, and the stars are orbs of fire, but he alleges that they are infinitely more glorious than they seem, and hence he argues, that this being the rule in nature, everything in *true art* should be more and richer than it at first appears, while, what he terms *false art*, seeks to make everything appear at first more and richer than it is.

According to this doctrine, all that is required to convert *false* into *true* art is to paint a rosewood door imitation fir; to plate gold with silver; to make picture-frames of gold, and cover them with stucco, instead of *vice versâ*,—and this worse than useless extravagance, this wanton invasion of economy, in terms of your correspondent's definition, would instantly change the false into the true.

Even in works of high art, I have always understood that the nearer they approximated to perfect nature—the more complete the deception—the greater their excellence, whether exhibited in the flesh tints of Titian or Etty, the expression of Raphael or Wilkie, the Venus of Milo, or the Apollo Belvidere.

In decorative art I have experienced much pleasure in gazing on the walls of many of the entrance halls and vestibules of the palaces and mansions of England, wherein the imitation of marble was so perfect that the eye was completely deceived, while the mind was all the while conscious that the walls were neither more nor less than plaster painted. I look upon the art that can accomplish this with pride and pleasure, as having attained such perfection in my native country (a *Snobland* according to "Calotect") and being quite aware that marbling and graining were practised in Egypt 3,000 years ago (not 2,000, as your correspondent, out of sheer pity, states for my information) when the Memnonium was in all its glory, and society was in a high state of civilisation, I have no hesitation in asserting that such arts flourish best in a country like Britain, where the domestic properties arising from the love of home afford the best guarantee for progress in all that ministers to man's intellectual and physical improvement.

I have now answered those points of "Calotect's" letter which have reference to me. I shall not prolong a controversy with an anonymous writer, and should "Calotect" again enter the lists, unless he attach his name to his challenge, I shall leave him in possession of the field.

JAMES BALLANTINE.

BLOTS ON HYDE PARK.

FROM the care taken some five years back in planting belts and clumps, coupled with the attention usually shown for the preservation of the greensward, one might naturally suppose that the authorities really have a desire to preserve the semblance of its primitive rural beauty.

In the memory of many, high dingy brick walls encompassed the bounds, but these have been removed and substituted by railings: the Serpentine was also some thirty years back improved, and the carriage-way continued over a new bridge, in itself the chief improvement, for the views from the balustrade are excelled by few private parks in England. About the same period the enclosure (next Kensington-gardens), called the Deer-park, was thrown open, and a road formed round the whole extent of about 400 acres. The cascade, or steps where water should fall, is hardly worth mentioning; for whatever might have been the original intention, there is no object of attraction there save when the wind blows strong from the west, and on such occasions crowds collect at the pond head to see the only waterfall visible in Middlesex, as the force of the wind blows the surface into mimic waves, and drives a streamlet through the grating which might possibly turn a knife-grinder's wheel!

If there be any plantation, any bridge, any scenic beauty in Hyde-park—if Regent's-park and its bowers, its waters, its long walks be an improvement to London,—it never was to any Board of Public Works that these advantages (and they are inappreciable) are due. No! it is to a monarch of surpassing taste, who, foreseeing the growth of the metropolis, provided for its increasing extent; who planned Regent-street, through the slums of town, and designed its extent *towards Highgate*, through the noble causeway (which he found accidentally constructed) of Portland-place.

If any taste prevailed we should have no blots on the national parks such as now disgrace them, no *powder magazine*, no *sergeant's guard-house*, no *hovels* for the harbour of carts and rubbish, no *petty ranger's lodge*, with four acres surrounded by a shapeless hoard—and we should have a free current of stream water flowing over the *chute* that now tells a *dry tale of ridicule* to the basquet which overhangs the artificial ravine.

That *eight acres* (or perhaps ten), the most beautiful portion of Hyde-park, should continue to be appropriated to the use of a subordinate pensioner (who, as is apparent from the neglected state of the grounds, prizes it not); that a paltry guard-house, useless but to protect the misplaced powder magazine—that woodcutters' hovels should be suffered to mar our boasted park,—shows want of taste in the office of management. The patronage, however, which bestows the power to provide for a single favourite, however little his merits, is, it seems, not to be given up; and if we may judge from the appropriations of public grounds made to private uses in Regent's-park, there is little to be expected by way of concession from commissioners to the public. In the latter park upwards of 100 acres have been fenced off and bestowed upon private residences within ten years! ! !

Judging from these facts, who could expect, in the proposed inclosure of the New Forest, an impartial, public-spirited, and just disposal of the lands? And unless the strictest vigilance be used in this respect, and that the whole district be applotted and submitted to fair sale by auction, there will be ample scope for jobbery.

The great building now occupies 18 acres of Hyde-park, and, excepting Mr. Elger (whose lordly mansions are much depreciated in value by its too close approximation), perhaps no individual can be found to fault it. Since this, then, restricts the public liberty on one side, surely it ought to be met by the relinquishment of the inclosures in the centre of the park. There is no telling how the objects for which the building was designed may yet be perverted. Should it be formed into an expansive conservatory it may be a public benefit; should it, on the other hand, be made exclusive, or permanently mercantile, or turned to any government or official advantage, it must prove an annoyance to the citizens.

The encroachments of officials make a government unpopular, while due attention to public wishes and wants reconciles the multitude, as in Russia, to even an absolute rule.

May it not be suggested that Wormwood Scrubs, about three miles from town, would be sufficiently vicinal for a powder magazine, and more out of the way of accident (a blow-up) than the site in Hyde-park; and also that the same location would also be better suited for *barracks* (cavalry, at least) than Albany-street or *Knightsbridge?* There is not as yet any great number of houses in that neighbourhood, nor are the Scrubs used for a place of public resort or recreation; in fact, they are of little value for building, and of none for pasture.

As a free population advances, let guards and pretorians recede: a civil police is best for free and popular institutions.

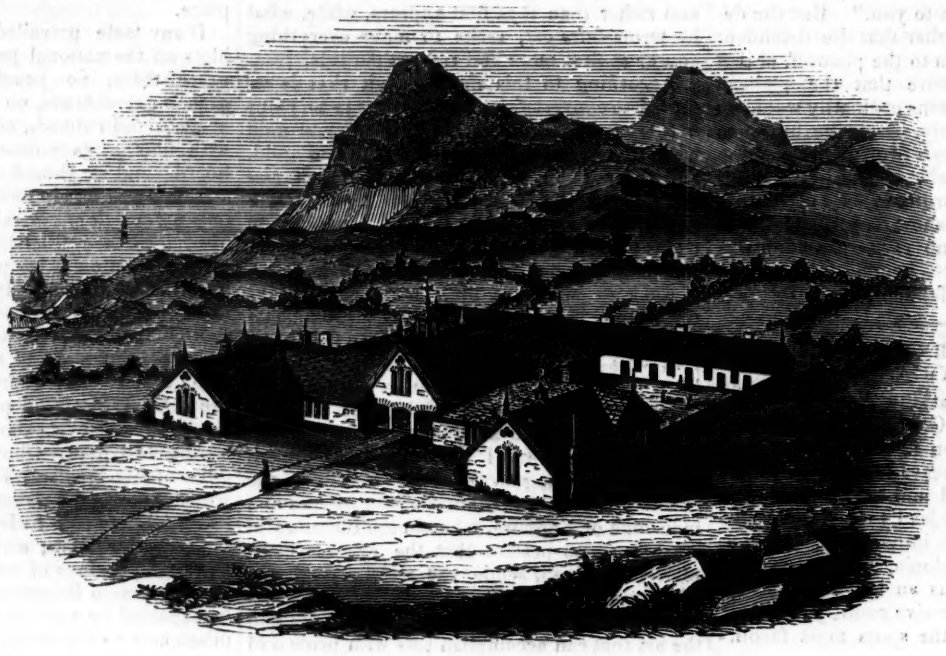
H.

AMERICAN ARTISTS.—We learn from the Boston *Daily Transcript* that a large number of artists, foreign and American, residing in New York, have agreed to contribute each a picture, for the purpose of forming a lottery, the proceeds of which are to be appropriated towards the relief of the 200 German emigrants who are sufferers by the wreck of the *Helena Sloman*.

AMERICAN HOTELS.—A new hotel is about to be built at Boston, six storeys high, with a dining-hall containing 5,625 square feet, and other rooms, to the number of 200, in due proportion. The building is to be erected by a joint-stock subscription.

ERRIS FISHING SETTLEMENT, MAYO, IRELAND.

Mr. Tinkler, Architect.



ERRIS FISHING SETTLEMENT, MAYO, IRELAND.

SIX VIEWS OF THE ANTIQUITIES OF ROME.

Six large views of the antiquities of Rome, carefully drawn on stone by Mr. T. C. Tinkler, architect, from sketches made by himself on the spot, have been published * in aid of the funds of the Fishing and Industrial Settlement for Boys, at Belmullet, Mayo, Ireland. The subjects are the Forum of Nerva, where

> ——"In many a heap the ground
> Heaves, as though Ruin, in a frantic mood,
> Had done his utmost;"

the Temple of Antoninus Pius and Faustina; the Arch of Constantine; the Temple of Jupiter Stator (?); and the Coliseum, "a noble wreck in ruinous perfection." The cheapness of the work, and the goodness of the object should ensure for these prints such a sale as will aid the funds now being raised, which are intended for the erection of a building capable of receiving 100 boys, to serve as a training-school, curing-house, workshops for boat-building, &c. Annexed we give a view of the intended settlement.

CHANCELS IN EARLY CHURCHES.

Sir,—I have no wish either to fight for Dr. Wiseman or to make your columns the arena of ecclesiastical disputation, but, as you have permitted Mr. Elliott on two occasions (see Nos. 374, 415) to make assertions relative to early church arrangements, which differ almost diametrically from the opinions of the majority of writers on the subject, I may, perhaps, crave your permission to beg of that gentleman to favour your readers with a brief statement of the authorities from which he deduces, and the arguments by which he substantiates, his opinions; as, if he can prove his points, he will be undeceiving those who have been led to entertain contrary views, or, if he fail, he will be removing any erroneous impressions which his, as yet, unsupported assertions may have produced.

The two points of which the *onus probandi* lies with Mr. Elliott are: First — that the chancel in early times was not screened, or, at the least, had only a low rail, and that merely to prevent persons stepping inadvertently from an elevated platform, not from any idea of sanctity; secondly—that the altar or communion-table did *not* stand within this space, but "in the midst of the congregation."

The received opinion is, I believe, the contrary of both of these, being, first, that the chancel was inclosed by a screen (whether high or low may be an open question), rather from an idea of the sanctity of the services to which it was devoted than from mere convenience, though probably from both reasons; secondly, that the altar or communion-table invariably stood within this inclosure. S.

* At the Office of the Committee, 32, Sackville-street, London.

BODLEY'S REGISTERED REVOLVING AND SLIDING WINDOW-SASH.

We have seen a rough model of an arrangement, devised by a working man, George Bodley, for preventing the necessity for workmen and servants risking their lives, as heretofore, in painting, glazing, or cleaning windows. The sash, which is hung in the usual way, is ripped down on each side flush with the face of the mitred bead, and is hung on a pivot to the slip on each side thus cut off, so that the sash can revolve, either to afford extra ventilation, allow the passage of furniture, or admit of being cleaned. When not required to revolve, a tongue of hard wood or metal is slipped down a groove formed in the side of the sash and of the slip cut off, which holds the two together, keeps out the weather, and enables the sash to slide up and down in the usual way. He proposes to alter old windows for a few shillings, and we trust that the opportunity will be afforded him of testing his plan on a large scale.

THE DRAINAGE OF THE METROPOLIS NORTH OF THE THAMES.

METROPOLITAN SEWERS COMMISSION.

On the 31st ult. the following report, by Mr. Forster, on the drainage of the Metropolis north of the Thames was brought before a Special Court:—

"In devising a plan of drainage for the northern portion of the metropolis, in accordance with instructions, and also in conformity with those principles by which I was guided in laying down the plan for the interception of the sewage of the southern side of the Thames, the district appears to divide itself into two separate areas, for which different means require to be adopted,—viz.:

1. The interception of the drainage of that district, which, from its elevation above the level of the outlet is capable of having its sewage and rainfall carried off by gravitation.

2. The interception of the drainage of that district which, from its low-lying position, will require its sewage, and in most localities its rainfall, to be lifted by steam-power to a proper level for discharge.

These two districts are indicated upon the general map (attached thereto) by distinctive colours.

The district for natural drainage is tinted red, its area being about 25⅛ square miles.

The district for artificial drainage is tinted blue, its area being about 16⅛ square miles.

In the two small tracts coloured dark blue,—viz., the southern part of the Isle of Dogs, and a narrow tract on the west side of the river Lea, it is intended to allow the rainfall to run into the Thames and the Lea respectively. The area of these two tracts amounts together to 1¾ square miles.

	Rainfall, Square Miles.	Sewage, Square Miles.
The total area, therefore, proposed to be drained by natural outfall from the district coloured red will be about	25⅛	25⅛
The total area proposed to be drained by the application of steam power from the district coloured blue will be about	14⅜	16⅛
	39½	41⅜

It will be observed, that the district lying to the south-west of the portions tinted red and blue upon the general plan is not included in the foregoing calculations of area, although it contains a portion of the Counters Creek, and the Fulham and Hammersmith districts, the total area of which is about 16 square miles. Of this area but a very small portion is at present built upon, and probably if one-half, or 8 square miles, be estimated as requiring the provision of means for interception of its sewage and rainfall, it will include an area which may not be built upon and populated for the next half century. I have not, therefore, deemed it needful to provide in my plan for the interception of the sewage and rainfall of a larger area than 8 square miles.

An additional reason for not doing so is that the establishment of the Metropolitan Sewage Manure Company's works is in the heart of the district, which is eminently adapted for the application of sewage water as a manure, and affords grounds for belief that the whole of the sewage produced in the district may be profitably applied, and that the interception of the sewage even of the eight square miles may not be rendered necessary, although to guard against contingencies I have provided for that area in calculating the sizes of the main low level line.

In the event, therefore, of the sewage not being applied as expected, it may be lifted and discharged, with the rest of the northern sew-

age, at Barking-creek; but it will be needful in that case to extend the Whitehall sewer from Scotland-yard so as to intercept the main low level sewer at Chelsea-road.

Having described the tracts to be drained, I have now to lay before the committee a statement of the means by which it is proposed to accomplish the effectual interception of sewage upon the principles laid down.

Commencing with the upper portion of the tract coloured red upon the general plan, and taking as a starting point the pumping station (hereafter to be more fully alluded to) on the eastern bank of the river Lea, at which point the whole of the sewage of both the high and low level districts will be concentrated, the main high level sewer commences, and crosses over the river Lea, near the "Four Mills," proceeding in a westerly direction under the East and West India Dock Railway and the Blackwall Extension Railway, beneath the Regent's Canal, to the east end of the Bethnal-green-road, at the crossing of the Cambridge-heath-road, at which point it will be joined by the proposed northern diversion of the Hackney-brook, which drains an extensive district up to the water-shed line north of London, including Hackney, Stoke Newington, and Holloway, and part of Highgate and Hampstead: from thence the main sewer proceeds along the Bethnal-green-road, Church-street, Old-street, Wilderness-row (where a short branch from Coppice-row will join), to Brook-street-hill; from thence to Little Saffron-hill, where a distance of about a hundred yards is proposed to be carried by an aqueduct over the Fleet valley; thence along Liquorpond-street, at the end of which it will receive a branch from Piccadilly on the south side, and a diversion of the Fleet-river on the north side; thence along Theobald's-road, Bloomsbury-square, Hart-street, New Oxford-street, to Rathbone-place, where it receives a diversion of the Regent-street sewer from Park-crescent; along Oxford-street, and extending thence across Regent-circus to Whitehorse street, where it will intercept the King's Scholars' Pond sewer; continuing still along Oxford-street to Bayswater-place, Uxbridge-road, where it is joined by the Ranelagh sewer, the sewage of which it is capable of receiving, and at this point it terminates.

	Miles.	Yards.
The length of this main high level sewer will be about.....	7	1,143
The Hackney-brook branch north	6	1,417
The Coppice-row branch north..	0	1,135
The Piccadilly branch south....	1	1,585
The interception of the Fleet up the Gray's-inn-road north	1	266
The Rathbone-place and Cleveland-street interception of the Regent-street sewer north	0	1,600
Making a total of	19	106

With respect to the low level tract, coloured blue on the general plan, it is proposed, commencing as before at the lifting point on the eastern bank of the river Lea, to construct a sewer at a depth of 47 feet below the invert of the high level sewer, proceeding beneath the river Lea, near to Four Mills Distillery, taking the north-western bank of the Limehouse-cut, at which point it receives the branch intended to intercept the sewage of the Isle of Dogs, thence continuing along the bank of Limehouse-cut, through a portion of the Commercial-road, Brook-street, and beneath the Sun Tavern-fields, into High-street, or Upper Shadwell, at a point opposite to the church; thence along Ratcliffe-highway and Upper East Smithfield, across Tower-hill, through Little and Great Tower-streets, Eastcheap, Cannon-street, Little and Great St. Thomas Apostle, Trinity-lane, Old Fish-street, and Little Knightrider-street; thence beneath houses in Wardrobe-terrace, and on the eastern side of St. Andrew's-hill, along Earl-street to Blackfriars-bridge. From Blackfriars-bridge it is proposed to construct the sewer along the river shore to the junction of the Victoria-street sewer at Percy-wharf, which sewer, between Percy-wharf and Shaftesbury-terrace, Pimlico, becomes an integral portion of the intercepting line at Bridge-street, Westminster. A branch from the Victoria-street sewer is intended to proceed along Abingdon-street and Millbank-street, so far as and for the purpose of taking up the King's Scholars' Pond, and other sewers, at their outlets into the Thames.

From Shaftesbury-terrace the Victoria-street sewer is proposed to be extended through Eaton-square and along the King's-road, Chelsea, to Park-walk, intercepting all the sewers along its line, and terminating at a point where the drainage of Kensington may be brought into it without pumping.

	Miles.	Yards.
The total length of the main low level sewer, including the extension of the Victoria-street sewer to Chelsea will be about.....	8	1,601
The length of the branch southwards and westwards for the drainage of the Isle of Dogs about....	4	360
The branch from Bridge-street, Westminster, along Millbank	1	1,300
The total length being about ..	14	1,501

Having now described the whole of the lines of intercepting sewers westward of the proposed pumping station on the eastern bank of the river Lea, I have, in the next place, to lay before you a similar statement as regards their proposed extension from that point to the outlet.

The invert of the high level sewer at the pumping station will be 20 feet above the Ordnance *datum;* the invert of the lower level sewer will be 27 feet below the Ordnance *datum*; the difference between the two being about 47 feet. The sewage of the lower level will thus be lifted to the higher level by steam-power, and both will be conveyed by two parallel lines of sewers from the pumping station to the bank of the river Roding, being the eastern extremity of Galleons-reach. The length of this extension will be four miles.

At this point the level of the inverts of the parallel sewers will be eight feet below high water mark, and here it is intended to collect the sewage into a reservoir during the flood tide, and discharge the same with the ebb tide immediately after high water; and as it is estimated that the reservoir will be competely emptied during the first three hours of the ebb, it may be safely anticipated that no portion of the sewage will be returned with the flood tide to within the bounds of the metropolis.

The inclination which has been assigned to the whole of the lines of sewers, with the exception of an inconsiderable portion, is not less than four feet per mile, or 1 in 1,320.

The sewers are calculated to carry off a fall of rain equal to a quarter of an inch in 24 hours, in addition to the average daily flow of sewage, which, in anticipation of the progressive increase in the population, has been assumed at double the present water supply. The pumping power needed to raise the sewage and rainfall of the lower level to the required height (or 47 ft.) is estimated at 1,100 horse power, in order to meet which it is proposed to erect two 550 horse power engines, together with a third engine of equal power (550 horse power), to meet the contingency of accident or want of reparation.

An abstract of the various lengths of sewers proposed will be as follows, viz.:—

	Miles.	Yards.
Of the high level sewer and its branches	19	106
The low level ditto and branches	14	1,501
The extension from the pumping station to the point of discharge at Barking-creek (parallel sewers), four miles each length..	4	0
Making a total of..	37	1,607

The whole of the sewage and rainfall (with the trifling exception before stated) of the areas coloured red and blue upon the plan (which at present discharge by the various outlets into the Thames) will be diverted and carried down to Barking-creek, excepting upon the occurrence of long-continued and heavy rains, or in frequent and violent storms, when the surplus water will be carried off by certain of the existing outlets into the river, but upon all such occasions the first scour or cleansings of the sewers will be conveyed to the main outlet at the river Roding.

From the time consumed in the manifold considerations necessarily involved in works so extensive in their nature, I have been prevented from laying before you a detailed estimate of the cost of the plan of interception. I am therefore only able to submit approximately that I estimate the cost of the whole of the lines of sewers, the pumping-engines, and station, the reservoir, tidal-gates, and other apparatus, at 1,080,000*l.*

This estimate does not include the sums required for the purchase of land and houses which may be needed for the site of the pumping-engine-house, and compensation for certain portions of the lines of sewer."

Sir H. De la Beche (in the chair) said it would be observed that in the report they proposed to avail themselves of two methods of draining the northern side of the metropolis, viz., to take a certain portion under a general level, and by means of what was generally called "gravity," to carry away all the sewage by a uniform slope of 4 feet per mile to Galleons-reach, which was, in fact, to arrest all the sewage that flowed into the Thames at that level, and to carry it away. Then another portion was left, which was to be raised by artificial means, in order to be carried to the same distance. That artificial raising was to be effected by steam power. He should not enter into the details of the scheme, but, looking at the whole plan as a generality, he thought it would strike the Commissioners as having a general resemblance to that which had been sketched out to them by Capt. Vetch some time previously. The main point was to convey away the whole of the sewage from the Thames, and to take it down to a point whence it could not return to annoy the inhabitants of the metropolis, and this plan, when finally adopted and carried out, would, in conjunction with that upon the southern side, entirely remove the sewage of London to beyond a point whence it could ever return again.

On the motion of the chairman, seconded by Mr. Alderman Lawrence, it was resolved, "That the engineer be instructed to prepare detailed plans and estimates in respect to the works recommended in the report now presented to this Court, and, so far as may concern the city of London, that such plans and estimates be prepared in conjunction with the surveyor to the Commissioners of Sewers for the City (Mr. Haywood)."

[Mr. Haywood, it is right to state, co-operated with Mr. Forster in the preparation of the report.]

Mr. Peto, M.P., said, in the course of other observations, that assuming this plan to cost 1,080,000*l.*, and assuming that, with the various incidental expenses which they all knew would arise in public works, and taking into account the further contingencies that might result for the site of the engine-house and compensation to parties who would be injured during their execution, he would take the estimated cost at 1,250,000*l.*, and he inquired what would produce that amount in thirty years, taking it at first at 4 per cent., and then at 5 per cent.? He found that the rental of the district north of the Thames, exclusive of Fulham and Hammersmith, was 6,337,624*l.*, and that a rate of only 3d. in the pound for a period of thirty years would reproduce the whole amount of 1,250,000*l.*, and would give to those who should succeed them at the termination of that time a perfect system of sewerage, for which every farthing would be paid. This was a very important fact. 3d. in the pound would cover the whole expense upon the northern side of the Thames, and 2d. in the pound the whole expense upon the southern side. The speaker strongly urged the establishment of public "halting places."

On the motion of Mr. Hardwick, who said he considered this report was the most important that had been brought under the notice of a public board for many years, it was resolved, "That the report upon the drainage of the metropolis north of the Thames, including

the city of London, which has now been presented, be printed, with a coloured map attached."

Sir J. Burgoyne stated, that some very influential gentlemen had it in contemplation to take up, upon a grand scale, a plan of utilizing the sewage matter.*

Books.

The Schools of Painting in Italy. Translated from the German of Kugler, by a Lady. Edited, with Notes, by Sir C. L. Eastlake, P.R.A. Second Edition. Two Parts. London: John Murray. 1851.

This new edition of Kugler's Hand-book of Painting, translated, if we mistake not, by Lady Eastlake, and edited by the accomplished President of the Royal Academy himself, is enriched with upwards of one hundred illustrations, drawn on wood by Mr. George Scharf, jun., from the works of the old masters mentioned in the book. It gives a general survey of the history of Italian painting, and will be found a valuable and pleasant instructor. Book I. treats of Early Christian art (the later Roman style, and the Byzantine style); Book II., of the Romanesque style; Book III. (the second stage of development), deals with the masters of the fourteenth century and their followers: Book IV., with the masters of the fourteenth century,—the schools of Padua, Venice, Umbria, and Naples. Book V. is devoted to the period of highest development and decline (the sixteenth century), and treats of Da Vinci, Michelangelo, Raffaelle, Coreggio, and Titian; and Book VI. treats of the masters of the seventeenth and eighteenth centuries,—the period of the Restoration and second decline.

We hope before long to make this work the text-book for an outline of the early history of art, and therefore content ourselves on this occasion with warmly recommending it to all who would gain a correct knowledge of the subject. It is very nicely got up, as all Mr. Murray's books are.

The Land Steward. By G. A. Dean, Agricultural Architect and Engineer: with Illustrations. London: Atchley and Co.

This is a volume of 300 pages, addressed, by the nature of its contents, to a much more numerous class of persons than its title would imply. The work may be said to be a general epitome of all that relates to land, as between landlords and tenants, as well as to intending purchasers,—each of whom will find useful information. The writer unites the advantages of being a practical agriculturist, as well as a practising farm architect. The first chapters are elucidatory of the tenure of land and buildings, the nature of dilapidations and fixtures, and the laws respecting them. The geological structure, soil, and climate of Great Britain and Ireland lead to some observations on drainage; and as this is now one of the great elements in the improvement of land, the extended inquiries on the subject by Mr. Dean are of value. The importance is evident, as hitherto the drainage of lands has been too often a work of haphazard, by persons totally unacquainted with the necessary laws of nature to ensure success. Upon farm buildings the author is at home, and makes some valuable observations on the choice of site, fitness of each class of buildings for their intended purposes, and the arrangement of farmsteads on the principles of economy of tending stock, and performing the various operations of the steading. In the construction of farm buildings the work will be found of great utility,—the improved system of agriculture imperatively demanding the superintendence of the architects for modern requirements,—the old and inconvenient erections, which were formerly made by uninstructed country carpenters, for farm buildings, being fast superseded by others. In the present state of the agricultural interests, in a condition of transition from torpor and routine to the application of science, "the land steward" becomes more than ordinarily valuable, and its readers will derive ideas of what is required at the present day, to ensure success in farming.

* We have received letters from several parties pointing out the extent to which (as they say) Mr. Forster's plan agrees with their own. One writer shows, without meaning any thing invidious, that Mr. Netherway's plan is, in many respects, identical with it. We would suggest to Mr. Forster that where he has an opportunity to give appointments to any who have worked out the subject he should do so.

Miscellanea.

Escape for Foul Gases.—Mr. R. Sutcliffe, of Idle, has addressed the following letter to *The Times*, in reference to the use of a tall chimney for the purpose of carrying off foul gases. "In the month of August, 1849, while the cholera was most virulently raging, I laid a line of pipes from the privies in our mill to the chimney. The draught of the chimney was thus brought to act upon the privies, and the noxious gases were thus carried aloft into the clouds. It has, indeed, been a relief to us, and our mill now enjoys as pure an atmosphere as any private dwelling-house. I felt myself bound in duty to lay the plan before our inspector (Mr. Saunders), and at his strong recommendation it has been extensively adopted, and has in all cases been found completely to answer. In fact, I have no doubt that even London itself might be completely ventilated by draughting the effluvia from the sewers into tall furnace-chimneys, when in active operation. The sulphuretted hydrogen, already so light, would be rendered lighter still from its expansion by the heat of the chimney, and would thus be carried into the clouds, and completely dissipated."

Improvement in Painting Iron Ships.—We understand that a private trial of an apparatus for warming the plates of iron ships while in the graving-dock was made on Friday, at Messrs. Garnett and Moore's North Foundry. It has been made to the order of Mr. Bacon, painter, Oldhall-street. The great difficulty of drying the plates of iron ships to make them in a fit state for painting has been long felt, while the ordinary methods of warming them have been tedious and troublesome, as well as very uncertain. The machine tried on Friday consists of a small furnace of plate iron, lined with brick, to which is attached a small fan. The whole is very compact, and is placed on wheels, and is moved by two handles like a wheelbarrow. The fan, being set in motion by a winch, drives a rapid current of air through the fire, which is of a hard coke, and this passes out through a pipe of eight inches diameter. This pipe has at the bottom a universal joint, so that it can be moved in any direction. The mode of using it is as follows:—The machine being placed in the graving-dock, a boy turns the fan, while a man directs the pipe to the bottom or side of the ship. By these means a powerful current of hot air is jetted on the plates, which soon become dry and warm, and in a fit state for painting. The trial was made on some large plates, with water poured upon them, and the result was very satisfactory. It will shortly be applied to an iron vessel. The apparatus is the invention of Mr. Grantham, who has obtained a patent for it.—*Albion*.

Sanitary Reform.—A deputation of the members of the Metropolitan Sanitary Association had an interview within the last few days with Lord John Russell. Thirty-three gentlemen attended, among whom were Viscount Ebrington, M.P., Colonel Sykes, Colonel Thompson, M.P., the Rev. J. M. Worthington, D.D., Major-General Sir John Rolt, Mr. C. F. T. Lord, the Rev. M. W. Lusignan, M.A., and Adolphus Barnett, M.B., honorary secretaries. Sir G. Grey and Lord Seymour were present. Dr. Barnett introduced the deputation, and Dr. Worthington read a letter of excuse from the Bishop of London for non-attendance on the plea of indisposition. Dr. Barnett presented a memorial, and the Secretary drew attention to the principal points alluded to in it, and to the filthy and degraded state of various parts of the metropolis, and the necessity for the introduction of comprehensive sanitary measures. Mr. Lord said, that on behalf of 3,000 medical men, he would urge the speedy passing of a bold, comprehensive system of sanitary reform, which should embrace the abolition of the window-tax, an improved water supply to the metropolis, and the regulation of lodging-houses. Lord John Russell thanked the deputation for their attendance and information. The subject was one which had received, and would continue to receive, the serious attention of the Government. It would be admitted that much had been already done by Government, and that the difficulties which arose from the due regard for the liberty of the subject and for existing interests rendered it needful to proceed gradually and with caution.

Useful Discovery.—An elegant snuff-box, made from a particular species of carbonic coal, by the Rev. W. Mitchell, minister of the Scottish Presbyterian Church, Woolwich, will be exhibited at the Great Exhibition of all Nations. The carbonic mineral takes on a polish so very transparent and beautiful, as to vie with that of the richest and finest alabaster marble. It has been ascertained that it can be fitted into fine lobby or bed-room tables of a deep and rich polish. It will also be of great utility in forming finely-polished picture-frames, flower urns, watch-seals, pillars for mantelpieces, public monuments, and for other purposes, and at an expense so trivial as to be almost within the reach of all.—*Advertiser*. Parret coal (a species of cannel) has been made use of for many years in Scotland, in a small way, for ornamental purposes. It cuts with a fine polish, much as plumbago does, even with a common pen knife, and when properly finished yields a beautiful but somewhat frail surface of jet black colour and marble lustre. The substance alluded to by the *Advertiser* is probably the same. Other amateurs are at work on it.

English Sculptors at Rome.—A communication from Rome announces a graceful act which must be recorded to the credit of Mr. Gibson, the sculptor; and which involves a suggestion—but now a vain one—to his brethren of the Academy at home. Mr. Gibson has, it is said, put up, in the English Protestant burial-ground in that city, a monument to the memory of that fine sculptor, the late Mr. Wyatt. . . . . The Academy loses more than Mr. Wyatt in not having added its title to such titles as he had to show.—*Athenæum*.

"London Labour and the London Poor."—Under this title Mr. Henry Mayhew is publishing, in a revised form, with many additions, the startling relations first issued by him in the *Morning Chronicle*. The first portion of the work is devoted to the London world in London streets, and is illustrated by views of real life from daguerreotype reflections.

The Shop-blind Nuisance, &c.—Observing, in a recent number of The Builder, that you have been measuring (by the altitude of "the whole of your architectural framework," from ridge-tile downwards) the height of shop-blinds, perhaps some of your readers may like to learn that in an Act of Parliament (10 & 11 Vict., July 22, 1847) for regulating the police of towns, clause 28 enacts "that every person who, to the obstruction, annoyance, or danger of passengers, places any *blind, shade, covering, awning,* or other projection *over* or along any *footway* (unless at *least eight feet in height in every part thereof from the ground*) shall be liable to a penalty of forty shillings *for each offence*. In last week's number of your useful journal, a district surveyor suggests, with regard to *halting places, &c.*, that "the paving boards of the different parishes can be at no loss to find suitable places for their erection." I beg to inform you that, in 1848, the St. John's, Clerkenwell, Paving Board constructed (under my superintendence), in Wilderness-row, by Charterhouse-wall, a public halting-place: it is in three divisions, and formed of inch smooth slate, with trapped gratings, drain, &c., and cost 15*l.*: it is supplied with water by the New River Company, at a nominal charge of 5*s.* per annum. The cistern on the top, with ball-tap, waste-pipe, &c., cost 3*l.* 5*s.* It has been a benefit to the public, and, if generally adopted, as suggested by your correspondent, would be much appreciated.

W. P. Griffith.

Conservatories opening into the Dwelling-house. — Every day the many gallons of water given to the plants rise into vapour, to settle on the various objects within reach. Therefore, in the drawing-room, or the room adjoining the conservatory, there should be nothing that will take injury from damp, because it will settle in pure water on the walls, and sink into tapestry, curtains, the backs of paintings, the covers of sofas and chairs; in short, it will lie or hang in drops on whatever will not absorb it, and sink into all that will. There is no good without its evil,—no enjoyment, without some corresponding trouble to maintain it. The conservatory—so great an ornament—so exquisite a luxury—may, without care, be the means of producing sickness in the house, destroying the furniture and ornaments, and doing endless mischief, unless it be counteracted by attention. Let the throwing open of the doors be the exception, and not the rule. Keep the damp air from the house as you would a pestilence. It is delightful to smell the perfume, but it carries poison with it, if allowed to make its way all over the house.—*Glenny's Journal.*

Machined Paper-Hangings. — The *Journal of Design* says—"It is well known that it is at least some dozen years since the cotton and calico-printers of Manchester first began to print from cylinders, and it was not until within the last four or five years that the paper-stainers applied the same principle to printing papers, of a simple character, in one or two colours. At the outset their success was very moderate, being unaccustomed to the use of body colours, and unacquainted with their peculiarities and the best methods of applying them. Consequently the papers produced were of a very inferior character and quality, and did not enter into competition with the block-printed papers. Lately some of the leading printers of the "golden flock papers," in London, have turned their attention to the use of the machine; and it is most satisfactory and surprising to witness the rapidity and precision with which papers of six or eight colours are run off, the whole eight colours being printed during the passage of the papers *once through the machine.* A single machine is capable of printing in one hour 200 pieces of paper, each 12 yards long, or 1,500 pieces equal to 18,000 yards, or 54,000 feet per day. The paper upon which the patterns are printed is manufactured in lengths of 2,880 feet each: these are afterwards cut into 80 pieces, each 12 yards long."

Lithography.—It is stated at Munich that Mr. Nicholas Zach has discovered a new process in lithography, by which he can give to any metal plate, traced by a sharp needle, a preparation that makes the design in less than an hour show itself in relief on the metallic plate. Zach calls the process metallographic.

Manufacture of Drain Pipes.—I observe, in the last number of The Builder, with reference to stoneware drain pipes, you say,—"As to the pipes now manufactured, complaints are made that they have not advanced in quality: on the contrary, it would seem that the increased demand has led to slovenliness and overhaste. The manufacturers should look to this in time, or they may be superseded." Now, sir, although it is perfectly true that a great proportion of the pipes are bad, both as regards shape and material, I apprehend the *cause* does not arise from the "great demand" (as I believe in this neighbourhood, at least, the potters have been, generally speaking, slack), but that builders &c. prefer an inferior article to a superior one, when they get the former somewhat cheaper. The consequence is, that those potters who make a good article, find they get "cut out" by others who make an inferior one; and, as a superior article does not command a fair price, they are sufferers to a great extent, the inferior description of pipes costing considerably less to manufacture, while they sell at a trifling reduction in the price. Would builders and others patronise those who make a superior quality (although they may pay a trifle more for it), you would soon find that pipes would improve. Thos. Smith.

Surrey Consumers' Gas-light Association.—On Friday in last week the ceremony of laying the foundation-stone of the works of this company at Rotherhithe was performed by the Lord Mayor, in presence of a large concourse of spectators. His lordship said he had no personal interest in the association, but he considered himself bound, upon public grounds, to support it, inasmuch as its object was to supply a good and cheap article of general consumption. The site of the buildings is close to the river. The retorts will be able to carbonize 66 tons of coal, and make 594,000 cubic feet of gas daily; or, when in full work, the annual amount of coal to be carbonized will be 24,090 tons, making 216,810,000 cubic feet of gas. Mr. F. A. Hedley is the engineer.

Carlisle Board of Health.—I would beg to call your attention to an advertisement issued by the Local Board of Health of Carlisle, relative to the appointment of surveyor; as I consider they are degrading the profession of an engineer. The duties required are, that the surveyor should give plans, reports, specifications, and superintend the drainage of the city, and other works connected with the laying out of land, preserving the river banks, &c.; the whole of which duties require a person of education and ability in the profession of engineer. So far, so good; but the Board, not content with these duties, actually degrade their surveyor, and call him "inspector of public nuisances," the duties of which are, that he has to make frequent personal inspection of all the privies and other vile holes in the city, and to see that these places are preserved clean, no person being placed under him to do these duties, which a policeman could perform in a superior manner to any engineer.—P. S.

Earth-slips.—On Monday week a very extensive slip of earth (about 1,000 yards) took place within about forty yards of the Woolley Tunnel, on the Barnsley end of the Lancashire and Yorkshire Railway. The embankment had for some time been watched. "Mr. Miller, who formed the line," says a contemporary, "and whose engagements extended over twelve months, expired only a week or two ago: hence the expense now incurred falls on the company."——Also, on Monday week, owing to the recent heavy rains, a slip of considerable extent took place in the cutting of the Aberdeen railway, about half-way between Laurencekirk and Marykirk.

Fire at New-cross Railway Station. —A fire occurred on Tuesday night (last week) at the New-cross railway station. The building, in which much property was consumed, was 700 feet long and 39 feet wide. It was formed of thin wood, similar to weather-boarding, and stretched in a continuous line along the railway from the more substantial brick buildings which form the passengers' station. Adjoining this long range of premises stood a temporary wooden shed, in which was deposited wood for lighting the fires of the various apartments in the station, and there is no doubt that the conflagration commenced in that small building. The loss will reach, according to the company's own estimate, 5,000*l.*

Canada Timber.—The lumber Trade of Canada with the United States is fast increasing. There were received in Lake Champlain the past year, from St. John's, no less than 31,785,941 feet of sawed lumber, and 1,660,000 (cubic) feet of square timber. In 1849, 12,000,000 feet of the former, and 1,150,000 of the latter. In 1847, there were received but 7,000,000 feet of lumber, and 310,000 of timber.

Plasterer's Extras and Loss of Plans.—At the Birmingham County Court lately, an action was brought to recover 7*l.*, as a balance of plasterer's work done by plaintiff (a journeyman), for the defendant, a tradesman in Bull-street, who has land and buildings at Soho-park. A verbal agreement was come to between the parties that 12*l.* should be the price of such work, but, according to plaintiff's statement, extra walls and cornices had been added by defendant, and his demand in consequence came to 27*l.*: of this 20*l.* had been paid. Mr. Norton thought the charges fair and reasonable, but Mr. J. Newey, architect and surveyor, considered 15*l.* as amply sufficient. This last witness admitted that, although he had looked at the work, and had designed the building, he had not measured the work done. At this stage of the case the judge asked for the original plan. This was said to have been lost by the workmen employed; and, under such a state of things, his Honour said, "I feel bound to order a verdict to be entered for the plaintiff for the amount claimed."

The Glasgow Athenæum. — One of those distinguished meetings, so characteristic not only of this age, but of this country, in which the noblest aristocracy in the world holds out the right hand of fellowship and goodwill to a people of whom none but rivals, emulous in the same good cause, ever hesitate to attribute a nobility no less superlative, took place on the 28th ult., when the Duke of Argyll for a whole hour-and-a-half absorbed the attention and the interest of more than 2,000 persons assembled in the great City Hall of Glasgow, as friends and promoters of the Athenæum in that city. Lord Eglintoun, Sheriff Alison, the Lords Provost of Edinburgh and Glasgow, and others also addressed the meeting, which "went off" with great *eclat.*

Hull Workhouse Competition.—We understand forty-four sets of designs were sent in, varying in cost from 5,584*l.* 7*s.* 9*d.* to 23,000*l.* and differing as widely in style and character as in estimate. The committee devoted five days to their examination, and, from the report, it seems they were of opinion that although a number of the designs possess many, and some of them most, of the essential requisites, yet that the design of Messrs. Lockwood and Mawson contains the best combination of them all. The building will accommodate 763 inmates, including the vagrants. The style of architecture is Italian, and the estimated cost 9,045*l.* The second premium was awarded to Mr. Moffatt, of Doncaster.

The Artesian Well at Southampton. —The boring for water at the Artesian well on Southampton Common, from which the town has been partially supplied with water for the last few years, and which has been looked upon as such an interesting experiment by the whole of the geologists of England, is to be stopped. The boring is nearly 2,000 feet deep. It must have ruined the original contractors. Either geology is greatly at fault, or ignorance has had the conduct of this unfortunate undertaking.

Brass in Memory of Mr. Basevi, Ely Cathedral.—In our notice of this brass in Ely Cathedral, last week, we omitted to mention that it was executed by the Messrs. Waller, and we now gladly supply the deficiency. Messrs. Waller are striving very efficiently for the re-introduction of memorial brasses: they are preparing a large specimen of the art for the Great Exhibition.

Survey of Swansea.—As I am able to satisfy, or partly so, "A Civil Surveyor," I do so with pleasure, by quoting the inclosed from the *Cambrian*:—"Several gentlemen connected with the Ordnance Department have arrived at Swansea, and they commenced the triangulation survey of the borough on Monday last, —a task which will, we understand, occupy their attention for five or six weeks. The rest of the survey will be carried out by Mr. Gant, the new resident surveyor of the local board." It is rather, I think, uncourteous in the Swansea Board of Health making no further disclosure of their proceedings to the competitors than the fact of their tenders being unaccepted. The least they could have done would have been to have given, in their circular, a list of the tenders, and their intentions with respect to them. It seems to me that they, in the first place, wanted a good survey, and afterwards discovered they had not sufficient funds to pay for it. I trust there is yet time for some friend of the family to prove practically that they are swivel-necked, and to turn them to the right about.—Gustessh.

THE SEWER ACCIDENT AT ISLINGTON.—We desire again to remind our readers of the case of the poor widows and orphans of the two workmen lately drowned in the sewer at Islington. An advertisement appears in our present number, from which it will be seen that subscriptions are being handed over to Mr. H. Johnson, of No. 46, Hatton-garden, for their behoof.

FIRE AT THE HOUSE OF LORDS.—Four of the masons have written to the *Times* to state that it was they, and not a policeman, who broke open the door of the tower when the fire occurred, and that a charge of inactivity made against the workmen was altogether unmerited.

PIRACY OF A REGISTERED DESIGN.—The Coalbrook-dale Iron Foundry Company have obtained a verdict for 10*l.* damages against a Mr. J. Page, of Aston, iron founder, for a fraudulent imitation of a registered design for a grate, of which the plaintiffs were said to have sold 5,000 in fifteen months. The ornamentation was altered, but the general form was the same. Mr. Page alleged that the grate cast by him had been made from models of his own to order of a Mr. Lenton, who wished to have six of a form pointed out to him.

THE QUEEN'S TOBACCO-PIPE is a furnace built in the very centre of the great tobacco warehouse at the London Docks. The furnace is kept for the purpose of consuming all the damaged tobacco which comes into port. As the warehouse is the Queen's warehouse, the furnace is really the Queen's Pipe. The scene in the Queen's warehouse is very singular. Long streets stretch right and left between the walls of tobacco-casks. Every one of these giant hogsheads is stripped twice from the tobacco during its stay in this warehouse; once on entrance to weigh it, and again before leaving, to ascertain whether the mass is injured; and to weigh what is found good for the duty, and for the sale price to the merchant. Thus the coopers take all these hogsheads twice to pieces, and put them together again. Your eye is now attracted by a guide-post, on which is painted, in large letters, "To the kiln." Following this direction, you arrive at the centre of the warehouse, and at the Queen's Pipe. You enter a door, on which is rudely painted the crown royal and the initials "V.R.," and find yourself in a room of considerable size, in the centre of which towers up the kiln,—a furnace of the conical kind, like a glass-house or porcelain furnace. On the door of the furnace is again painted the crown and "V.R." Here you find in the furnace a huge mass of fire, and around are heaps of damaged tobacco, tea, and other articles ready to be flung upon it as it admits of it. This fire never goes out, day or night, from year to year. [It seems to destroy an immense quantity of food, clothing, and other necessaries for which thousands of the poor would be thankful.] Such is the Queen's Tobacco-Pipe, unique of its kind, and in its capacity of consumption. None of the other docks have anything like it. It stands alone. It is *the* Pipe—and establishes the Queen of England, besides being the greatest monarch on the globe, as the greatest of smokers—not excepting the grand Turk, or the Emperor of Austria, the greatest tobacconist in Europe. — *Dickens's Household Words.*

TENDERS

Tenders for building a Board Room, Offices, and a House, Saint Matthew's, Bethnal-green. Mr. G. H. Simmonds, architect. Quantities provided :—

	£	s.	d.
Oliver, jun.	4,200	0	0
Hall	3,994	0	0
Burton	3,871	0	0
Hopkins and Roberts	3,800	0	0
Hill and Son	3,795	0	0
Higgs and Case	3,777	10	0
Hey	3,719	0	0
Hill	3,590	0	0
J. and C. Knight	3,540	0	0
East	3,498	10	0
Carter	3,497	0	0
Deeks and Son	3,490	0	0
R. and G. Curtis	3,442	0	0
Withers	3,265	0	0
Seal and Jackson	3,216	0	0
Wood and Sons	3,195	0	0
Perry (accepted)	3,094	0	0

TO CORRESPONDENTS.

"Mr. W." (we should like to see the drawings: they would be safely returned), "Observer" (should have sent his name), "A Surveyor thirty Years," "W. T." (under our mark), "A. L.," "Ipswich Competition" (* * * should send his name), "J. H." (may make his assertion *in his own name* if he please), "H. B. G.," "W. J. W." (against our rule), "Johnny," "F. A. S.," "T. S.," "H. S.," "H. W. S.," "P. H.," "A District Surveyor," "T. M." ("Elliptic Gothic" is a misnomer), "E. B. M." (we must decline recommending), "H. T. C." (we think not), "Democritus," "A Subscriber," "R. F." (we cannot give the number: the wood columns are used to form the external enclosure only), "C. L." (must have been a misunderstanding), "E. and H.," "M.P.," "A Constant Subscriber" (as to dilapidations: yes), "A Working Man," "A Competing Architect" (we fear the claim could not be maintained), "Amateur of Architecture" (next week), "A Subscriber" (we described the Philharmonic Hall, Liverpool, some time ago, but did not give a plan), "J. M. S." (we must be excused from deciding wagers), "W. C." (thanks), "D. C.," "J. E. N." "A. F. L." (we have shown reason to believe that the invention was an Irish one, or at least by a resident in Ireland: several patents are spoken of, and we know not to which the project in question relates).

"Books and Addresses."—We have not time to point out books or find addresses.

NOTICE.—All communications respecting *advertisements* should be addressed to the "Publisher," and not to the "Editor:" all other communications should be addressed to the EDITOR, and *not* to the Publisher.

ADVERTISEMENTS.

AN ARCHITECT in good practice, and holding a Government appointment, has a VACANCY in his Office for an Out-door Articled Pupil; as the terms are liberal, none but a well-educated youth, possessing both taste and ability for the profession, will be treated with.—Address S. S., at the Office of "The Builder," 1, York-street, Covent Garden.

THE PRINCIPAL ENGINEER of a public company, going abroad this month, intends taking one PUPIL out, to whom he has an opportunity of offering unusual advantages. Good handwriting and some taste for drawing or knowledge of mapping indispensable. The strictest investigation will be made as to steadiness, integrity, industry, and habits of subordination. One-half the fee returned during the term of apprenticeship, and all expenses paid, &c.—Address P. W., Messrs. Troughton and Simms's, 136, Fleet-street, London, from whom some information may be obtained. The pupil will not be required to sail before May; but as the advertiser leaves on the 15th, application must be immediate.

TO MASONS.

WANTED to APPRENTICE a well-educated YOUTH, in his 14th year, to a respectable MASON, as an in-door Apprentice. A premium will be given.—Address to W. C., prepaid, at No. 1, Oddy's-row, Islington-green, Islington.

TO CIVIL ENGINEERS AND SURVEYORS.

WANTED, to PLACE a YOUNG MAN, 18 years of age, of good education and taste for drawing, as IN-DOOR PUPIL to an Engineer and Surveyor, of large provincial practice, for two or three years. A moderate premium will be given.—Apply (post-paid) to C. B., Mr. Browne's, Bible and Crown, Market-place, Leicester.

TO PARENTS AND GUARDIANS.

WANTED, a respectable YOUTH, as an APPRENTICE to a PIANOFORTE MAKER, in or out-doors, one that has been to the bench as a cabinet-maker or carpenter would be preferred. Premium required.—Apply, prepaid, to G. B., 17, Temple-street, Whitefriars; or to W. H., 5, New Bridge-street, Vauxhall.

WANTED, by a middle-aged steady and active Man, a SITUATION as SHOP or OUT-DOOR FOREMAN to a BUILDER, the advertiser having been several years engaged in that capacity. Satisfactory reference as to character and ability.—Address A. E., 89, Chiswell-street.

TO BUILDERS, &c.

WANTED, by a BRICKLAYER, a situation as FOREMAN. Can have twelve years' character from his last employers; is fully competent in estimating, setting out work, measuring, &c.—Address, D. L., Office of "The Builder," York-street, Covent-garden.

TO BUILDERS AND OTHERS.

WANTS a SITUATION in an Office a YOUNG MAN, aged 20, who writes and reckons well. He is willing to make himself generally useful; has a good character. Or as Improver at the Bench. Small salary, with chance of improvement.—Please address A. W. H., 57, Britannia-terrace, City-road.

WANTED, a Situation as ASSISTANT in an ARCHITECT'S OFFICE, in Town or Country, by a good Draughtsman, thoroughly acquainted with Perspective Colouring, making Working Drawings, &c. Salary moderate. A permanent situation being required, satisfactory references can be given.—Address A. C., Office of "The Builder," 1, York-street, Covent Garden.

TO CIVIL ENGINEERS, CONTRACTORS AND BUILDERS.

WANTED, by a respectable Person, who wishes to make himself thoroughly useful, a SITUATION as GENERAL SUPERINTENDENT, or Inspector of Works. He has had seven years' experience in railway works, five years of which he was employed in superintending the erection of works, and afterwards in measuring them. A builder by trade. Satisfactory references as to competence and trustworthiness can be given.—Address, H. R., Post-office, Norwich.

TO ARCHITECTS AND SURVEYORS.

A YOUNG MAN, having completed his articles with an architect and surveyor, wishes for an ENGAGEMENT in an office, where he will have opportunities of further improvement. A small salary required.—Address by letter to A. W., 7, Dalston-terrace East, Dalston.

TO PLUMBERS, BUILDERS, &c.

A PRACTICAL PLUMBER & GLAZIER, in all its branches, wants a SITUATION, as above, or in a glass-cutter's shop; understands glazing in lead, measuring, or keeping accounts.—Address G. PUDDICOMBE, Great Western Newspaper Office, 3, Harrow-road.

A RESPECTABLE YOUNG MAN, aged 22, is desirous of a RE-ENGAGEMENT as Assistant in an Architect, Surveyor, or Builder's Office in Town or Country. He is a good Draughtsman, can take out Quantities, understands Measuring, and the general duties of an Office. Salary very moderate.—Address A. C., 8, Havil-street, Camberwell.

TO ARCHITECTS AND BUILDERS.

A WELL-EDUCATED YOUTH, who is about leaving an architect's office in London, in which he has been for two years, wishes for a SITUATION which will afford him opportunities for further improvement. He is a good draughtsman and colourist. Improvement being the sole object, no salary will be required.—Address, post-paid, B. T., Earle's Library, 67, Castle-street, Oxford-street.

COLOSSEUM.—NEW PANORAMA.—This Establishment has been entirely re-decorated with additional splendour, and is NOW RE-OPENED with a New, Grand "TEMPERA" PANORAMA of the LAKE of THUN and Magnificent Swiss Scenery, painted by Messrs. Danson and Son. Open from half-past ten till five, and from seven till half-past ten. Music from two till five, and during the evening. Admission, 2s.; children and schools, half-price. Cyclorama, Albany-street. Admission, 1s. A Grand Moving Panorama of Lisbon and the Earthquake in 1755 is exhibited daily at three, and in the evening at eight o'clock; illustrated by appropriate music on the new grand Appollonicon. Children and schools, half-price.

ROYAL POLYTECHNIC INSTITUTION.—Lecture on the Music of Wales, by Ellis Roberts, Esq. (Harpist to H.R.H. the Prince of Wales, with Vocal Illustrations by Miss Blanche Younge, R.A. of Music.—The celebrated Juvenile Harpists (the Lockwood Family) will perform Trios, under the direction of Mr. Frederick Chatterton, daily at Four o'clock.—Lecture by Dr. Bachhoffner on Voltaic Electricity, in which will be exhibited Allman's Patent Electric Light.—Lecture by J. H. Pepper, Esq., on Fire and its Antagonists, illustrated with brilliant Experiments.—Exhibition of the Oxy-Hydrogen Microscope.—Entirely New Series of Dissolving Views, illustrating some of the Royal Residences of Europe.—Diver and Diving-bell, &c., &c.—Admission, 1s.; Schools, half-price.—Open daily from Eleven till Five o'clock, and every evening (except Saturday) from Seven till Half-past Ten.

TOURIST'S GALLERY, Her Majesty's Concert Room, HAYMARKET, WILL OPEN in a few days, with the First Representation of Mr. Charles Marshall's GREAT MOVING DIORAMA, illustrating the grand Routes of a TOUR THROUGH EUROPE, commencing with the departure of the "John Bull" steamer from the Tower of LONDON for HAMBURGH—ROUTE THROUGH GERMANY, Prussia, Austria, Bavaria, and down the Danube to Constantinople—ROUTE THROUGH ITALY, Passes of the Alps through Switzerland to Geneva—ROUTE DOWN THE RHINE, TO COLOGNE AND HOME.—The Diorama will be accompanied by a Descriptive Lecture, and appropriate Music.

GUTTA PERCHA PAPER, a cheap substitute for lead on damp walls, sold only by JEFFREY, ALLEN, and CO., Manufacturers of Paperhangings, Kent and Essex Yard, Whitechapel, London. They solicit the attention of the trade, builders, &c., to their papers made by improved machinery, which they can offer at very reduced prices. Merchants will find these goods well adapted in quality and price for foreign markets.

PAPER-HANGINGS at E. T. ARCHER'S Manufactory for English, and Warehouse for English and French Paper-hangings, and all materials connected with the trade. The Panelled Decorations are fitted up on the walls of an extensive range of show-rooms, giving at one view a drawing or dining-room furnished fit for occupation.

LIST OF PRESENT PRICES.

Painted marble, granite, and oak papers	1d. per yard.
Superior bed-room papers.....	1d. "
Satin ground papers for bed-rooms, drawing and dining rooms.....	3d. "
Flock papers on grounds, and crimson flock on oak	4d. "
Bronze drawing-room papers.....	9d. "
Rich gold paper	1s. 6d. "
Ditto and Flock	2s. 0d. "

10,000 feet of gilt mouldings always in stock.
E. T. ARCHER, 451, OXFORD-STREET, LONDON.
January, 1, 1850.

LATE FATAL SEWER ACCIDENT at ISLINGTON.—In consequence of this melancholy event two widows and nine young children are left totally unprovided for, from the loss of their husbands and fathers, George Ellis and William Boling; who were accidentally drowned on the 17th inst., in a sewer at Islington. Unfortunately the widow of William Boling is now pregnant. It is hoped that this appeal to the public will be the means of raising a sufficient sum to place the distressed widows in a position to support, through their own exertions, themselves and their fatherless children. The smallest contributions will be most thankfully received and acknowledged by the Treasurer, or any of the undermentioned persons:—Mr. John Cox, King's Head, Lower-road, Islington; Mr. Thomas Adamson, 21, Church-street, Islington; Mr. J. H. Eldred, Bleeding Hart-yard, Hatton-garden; Mr. Lichfold, 6, Lower-street, Islington; Mr. D. Harris, 1, Bowman's-place, Holloway; Mr. E. Parfitt, Sekforde Arms, Sekforde-street, Clerkenwell; and Mr. Henry Johnson, 46, Hatton-garden, who has consented to act as Treasurer.

List of Subscriptions already received :—

Per Mr. J. Cox.			
Mr. J. Cox	£2	2	0
Henry Cox	1	1	0
Mrs. J. Cox	0	10	6
Miss Cox	0	10	6
Mr. Barker	0	10	0
Mr. Cobbett	0	5	0
Mr. Bateman	1	1	0
Mr. Robinson	0	10	6
Mrs. Chamberlain ..	0	5	0
Mr. Drake	0	5	0
Mr. Weiden	1	1	0
Mr. Rhodes	1	1	0
Mr. Browne	1	1	0
Mr. Kesteven	0	10	0
Small Contributions, per Louisa, 11, Finch-lane	3	4	6
Per Mr. Thos. Adamson.			
Jacob Post, Esq. ..	2	2	0
T. Adamson, Esq. ..	1	1	0
Messrs. Green, Son, and Jones	1	0	0
Thomas Wonter, Esq.	1	0	0
Jos. Wonter, Esq. ..	1	0	0
Caleb Vines, Esq. ..	1	0	0
W. Lavers, Esq. ..	1	0	0
W. Edwards, Esq. ..	0	10	0
P. Edwards, Esq. ..	0	10	0
O. Nutter, Esq. ..	0	5	0
J. B. Price, Esq. ..	0	5	0
A Friend	0	5	0
Small Contributions ..	0	7	6
Per M. Jno. Hy. Eldred.			
Mr. Jno. Hy. Eldred ..	1	1	0
Mrs. Eldred	1	1	0
Mr. Humphreys ..	1	1	0
Mr. Chater	1	0	0
Mr. Abbott	0	5	0
Mr. Parsons	0	5	0
Donations from Friends	1	5	6
Workmen in Mr. Eldred's employ.. ..	1	11	0
Per Mr. C. Lickfold.			
Mr. C. Lickfold ..	0	12	6
Mr. Hinton	0	10	0
Mr. L. Lickfold ..	0	6	6
Mr. Guerrier	0	5	0
Mr. Goodburn	0	5	0
Mr. Crespin	0	5	0
Mr. M'Andrie	0	5	0
C. B.	0	5	0
A Friend to the Afflicted	0	5	0
Mr. Hewitt	0	5	0
Mr. Hagell	0	5	0
Mr. Williams	0	5	0
Mr. Nicholl	0	5	0
C. J.	0	5	0
Mrs. Hooper	0	5	0
Mr. Smith	0	5	0
Small Contributions ..	2	9	0
Per Mr. Daniel Harris.			
Small Contributions ..	3	14	9
Per Mr. Parfitt.			
Mr. and Mrs. Parfitt ..	0	10	0
Mr. and Mrs. Taylor ..	0	5	0
Philanthropy	0	5	0
Small Contributions ..	2	5	8
Per Mr. R. Hopwood.			
Mr. R. Hopwood ..	£1	1	0
Mr. E. E. Benest ..	1	1	0
Mr. J. Benest	1	1	0
Edward Gotto, Esq. ..	2	2	0
Frank Forster, Esq. ..	2	2	0
Mr. W. Betts, jun. ..	1	1	0
Mr. Fletcher	0	5	0
Mr. G. Donaldson ..	0	10	0
Mr. T. Linch	1	1	0
Mr. Scott	0	5	0
Mr. Fry	0	5	0
Mr. Dunhill	0	5	0
Mr. Dowley	0	5	0
Mr. Rowell	0	10	6
Mr. Fletcher	0	5	0
Mr. Lloyd	0	5	0
Mr. Lovegrove, sen.	0	5	0
Small Contributions ..	1	2	6
Per Mr. W. Mansell.			
Mr. W. Mansell ..	0	5	0
Mr. Joseph Mansell	0	5	0
Mr. Fosharding ..	0	5	0
Mr. Williams	0	5	0
Small Contributions	4	5	0
Per Mr. Henry Johnson.			
Mr. Henry Johnson	10	10	0
A Friend, per ditto	5	5	0
Mr. T. Smith	1	1	0
Messrs. Freeman and Richardson	1	1	0
E. S., per H. J. ..	0	5	0
Mr. Hume	1	1	0
Mr. Pullman	0	5	0
Chas. Merry, Esq. ..	0	10	0
T. S. (postage stamps)	0	5	0
Mr. H. Doulton ..	2	0	0
Messrs. Roffey and Bowyer	0	5	0
Mrs. Robinson	0	10	0
Mr. B. Gough	1	1	0
Mr. Healey	0	5	0
T. G. Lawrence (stamps)	0	10	0
A Lady, per H. J. ..	0	10	6
S. Cumings, Esq. ..	0	10	0
N. Bennett, Esq. ..	0	5	0
Messrs. Lee and Son ..	1	1	0
Henry Swann	0	10	0
John Gibbons, Esq. ..	0	10	0
Small Contributions ..	0	19	6
Workmen in Mr. Johnson's employ	3	17	0
Proprietors of "The Builder"	1	1	0
John Randell, Esq. ..	0	10	6
H. B., per H. J. ..	0	5	0
Messrs. A. and M. Burton	1	1	0
James Weston, Esq. ..	1	1	0
Wm. Collins, Esq. ..	0	5	0
J. Collins, Esq. ..	0	10	0
E. S., per H. J. ..	0	5	0
A Friend to the Widow and Fatherless ..	0	5	0
Messrs. Wakeling ..	0	5	0
E. R. Boulter	0	10	0
Small Contributions ..	5	2	0